

# MANUFACTURERS' RECORD.

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

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## Manufacturers' Record.

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BALTIMORE, APRIL 3, 1896.

### Covers the Whole Country.

Every man in the South who wants to attract the attention of Northern and Western people should read the following, as a sample of many similar voluntary letters:

Morganton, N. C., March 23.  
Southern States Magazine,  
Manufacturers' Record Building,  
Baltimore, Md.

Gentlemen—We enclose check to cover bill for advertising for three months. Our card in your magazine has brought inquiries from Tampa to Toronto and from Portland, Maine, to Portland, Oregon. Very truly,

THE MORGANTON LAND &  
IMPROVEMENT CO.,  
(Signed) W. C. ERVIN, Secretary.

Why not try the "Southern States" as an advertising medium? Published by Manufacturers' Record Publishing Co.

A brief article in this issue tells how a Richmond concern, less than three years old, has forced its high price cream white bricks into the most exclusive circles of New York, and how the leading architects of that city now make this Virginia product the standard of excellence. This is only one more illustration of how the South is developing its manufactures and broadening the market for its output. What this Richmond company has done should be an inspiration to others throughout the South to develop natural resources, to make the best goods, and to find a market in other sections as well as at home. There is a broad field for such work, and the opportunity is open for many.

Following the suggestion of President Baxter, the Tennessee Coal, Iron & Railroad Co. has appointed a committee, composed of Messrs. James T. Woodward, W. S. Gurnee and James A. Swann, to look into the question of the erection of a steel plant at Birmingham. It is more than probable that the outcome of this action will be that this, the most extensive coal and iron enterprise in the South, will undertake the building of a large steel plant in Alabama. Report says that one-half of the \$800,000 capital needed has been subscribed. Vice-President Shook, of the Tennessee Coal, Iron & Railroad Co., telegraphs to the Manufacturers' Record from Nashville in regard to a

report sent out from New York that the capital had been raised for the proposed steel plant in Alabama as follows: "Steel-mill matter not definitely settled, but think it will be in a few days."

### The Nicaraguan Canal Matter.

Col. William Ludlow, of the United States Army, was recently sent abroad by the President to investigate European canals. In an interview, published in London, outlining the result of his investigations of the Suez and other canals, in connection with a study of the Nicaraguan canal, he said:

I am more than ever convinced that the Nicaraguan canal enterprise is feasible.

Such is the testimony of a distinguished army engineer, as against the silly vaporings of Mr. Joseph Nimmo, Jr., and a few others who are trying to prove that the Nicaraguan canal is not feasible. No one who has studied the situation can but realize that the construction of this canal would revolutionize the world's commerce. Its value cannot be measured. There are, of course, some who, from prejudice or from other motives, seek to belittle the possibilities of the Nicaraguan canal, and Mr. Joseph Nimmo, Jr., has recently undertaken to give much time to the publication of matter against this enterprise, and to the free distribution of a pamphlet designed to show that its construction is not feasible, and that if it were feasible, it would not pay. The Manufacturers' Record would be glad to know why Mr. Nimmo takes such an interest in the free distribution of pamphlets against this canal, and whether any railroad influence is at the back of his work, footing the bills for such an outlay. It is hardly to be supposed that a private citizen, having no interest whatever in the subject, so far as the public can learn, would be making it the business of his life to spend time and money in so vigorously fighting the Nicaraguan canal. It is a legitimate question to ask if Mr. Nimmo is doing this wholly from patriotic motives, or is he doing it because railroads or other influences hostile to the canal are making it profitable for him to do it?

Notwithstanding the enthusiastic commendation of such a canal by Commodore Maury, who, as far back as 1849, made a report upon it to the United States Senate, in which its value was more brilliantly outlined than any man has ever been able to do since, Mr. Nimmo attempts to quote Commodore Maury as bitterly opposed to an isthmian canal. When asked by the Manufacturers' Record for his authority for the extract credited to Commodore Maury, he could only reply that he had taken it from a letter by Engineer E. L. Corthell in a railway paper. As to where it could be found in Commodore Maury's writings, or what the context was, Mr. Nimmo was absolutely ignorant, and yet he has been parading it as the views of Maury against this canal.

A few weeks ago the Manufacturers' Record received a letter from a prominent railroad president, in which he said "the construction of the Nicaraguan canal would prove disastrous to this road." Is it this influence of some railroads that blocks the Nicaraguan enterprise?

Commenting on Mr. Nimmo's predictions, Gunton's Magazine says:

Mr. Nimmo's brief is as solid and memorable as Daniel Webster's argument that no railroad train could run in cold weather, or stop within three miles of any particular town if it reached a high rate of speed (twelve miles an hour being the rate they thought of), or pay expenses if it had to be laid on "solid mason work." The first projectors of the New York Elevated were sure that no locomotive could be used to draw the trains, as the vibrations produced by its weight would crumble the iron structures. Hosea Biglow's maxim, "Don't never prophesy unless ye know," is one for which Mr. Nimmo feels profound contempt.

### The Port Royal Dry-Dock.

The actual facts in regard to the docking of the Indiana at Port Royal are given by Mr. S. H. Rogers, of Port Royal, in a letter to the Manufacturers' Record, in which he says:

I was at the naval station, Saturday, and conversed with Captain Evans, of the battleship Indiana; Captain Rockwell, commanding the station, and Engineer George Mackay, who, representing the government, superintended the building of the dock from its inception, and other well-informed and reliable officials. It is, as you know, eminently unprofessional for these officers to entertain one with a lengthy interview, as their official utterances must be by and through reports to the Navy Department. However, the gentlemen were by no means reticent in expressing their general views as to matters connected with the bar and harbor of Port Royal and the successful docking of the Indiana and the substantiation of the dock. They were unanimous in favorable comments. From what was told me by these gentlemen, I deem the following communication from the Columbia State, written by Mr. William Elliott, Jr., who also conversed with these officers, as substantially correct in every particular:

"The following are extracts of interviews had by the State's correspondent at Port Royal with Captain Evans and others on the docking of the Indiana:

"Captain Evans, of the Indiana: 'The docking has been a complete success, as you can see. It does not require an expert or naval officer to perceive that fact. The bottom of the dock has not settled, or, if at all, only the fractional part of an inch. This is a most unusual thing when docks are tested fully for the first time. The New York, Massachusetts or Texas can be much more easily docked than the Indiana, as they are much lighter in draught.'

"Civil Engineer George Mackay, who has had charge of the construction of the dock from the day the first pile was driven, said: 'Of course, the dock is a success. I have never for a moment doubted that, but my only fear was of some accident that might cause prejudice against the work; but everything has turned out as satisfactory as possible. The actual work of the docking was the most perfect I have ever seen—not a hitch or a moment's delay. We are, indeed, pleased, for on this dock more depends than is commonly realized.'

"Captain C. H. Rockwell, the commandant of the naval station, said: 'From great anxiety we have turned to the highest satisfaction. The Indiana went into the dock without touching any part of the dock. She has been most skillfully managed, and the soundness of the dock is assured.'

"Peter Lea, the pilot, who has been in charge of the Indiana since she has been in port, says that the least sounding taken on

the way to the dock was six fathoms, and the water all the way up was much deeper than that."

To this Mr. Rogers adds:

It should be remembered that when it is said there was twenty-six feet depth of water in the dock, it means from the sill up, but it was really thirty-one feet ten inches from the bottom of the dock. The vessel rests on blocks five feet ten inches above the bottom of the dock and ten inches from the level of the sill. The blocks can be lowered, if necessary, ten inches.

Who controls the ring that is putting out these persistent misrepresentations of the Port Royal dock and Port Royal harbor is a question which the Navy Department might find worth investigating.

Since the above was in type a dispatch has been sent out from Washington, from which we take the following:

Whatever doubt has existed regarding the capacity and structural strength of the new dry-dock at Port Royal is removed by the report of the commanding officer stationed there on the docking of the Indiana, which came off last week. He declares the dock fulfills all the desired purposes, and carries sufficient water over the sill at ordinary high tide to float the heaviest ships of the new navy. No strain has been developed or weakness shown, and in all respects the dock is strong, well built and admirably adapted for holding the battleships, which, until its completion, were unable to dock anywhere on this coast. The dock has been subjected to careful measurements and tests with instruments to determine the effect produced by the weight of the Indiana, and at no point has there been developed the slightest symptom of weakness.

### What the Nashville Exposition Can Do.

The progress of the Nashville Exposition, as outlined by our special correspondent, indicates that the South is to have another exposition equalling in its influence upon this section the great work accomplished by Atlanta. The world has for some years seemed to think that in Atlanta are centred all the energy and enterprise of the South, and that no other city in this section could have successfully handled such an exposition as Atlanta's. The Manufacturers' Record has ever been foremost in giving full praise to the tireless energy of Atlanta, but it is glad to note that there is a prospect of the world's seeing that Atlanta's enterprise is but typical of the whole South. Nashville has an opportunity to show that this is true. It can demonstrate by a grand exposition that the same energy and enterprise which made success possible in Atlanta can be found in every part of the South, and only needs the opportunity to prove what this section can do. This is what Nashville has undertaken. Its success will do even more for the South than the Atlanta Exposition accomplished, because it will emphasize the fact that not in Atlanta alone, but all over the South, is there a determination to develop to the fullest extent the resources of this section, and that the energy and enterprise needed for this great work are being stirred into activity everywhere. The Manufacturers' Record looks to Nashville to carry forward the educational campaign, which must never halt until the



whole business world sees what this section has and what its own people are accomplishing.

### Unjust Attacks of Philadelphia Papers on the South.

It is difficult for anyone who does not see the Philadelphia papers every day to realize the bitterness of most of them against the development of the ship-building business in the South and the building of government dry-docks in the South. When the Newport News ship-yard underbid the Cramps by \$1,000,000 on contracts for the two battleships, the bid of the Newport News yard being about \$4,500,000, against \$5,500,000 of the Cramps, the Philadelphia papers, with the most bitter vindictive spirit, absolutely ignoring every fact in the case, denied that it was possible for the Newport News yard to build such ships, thus ignoring the universal testimony of ship-builders that that is one of the finest ship-yards in the world. These same papers denounced with unsparring venom the Norfolk-built battleship Texas, and have never ceased to misrepresent Port Royal and the Port Royal dry-dock. The Manufacturers' Record does not believe in this kind of warfare. It has no desire to attack the industries or the interests of any other section, unless forced, in defense of the South, to some little retaliation. Purely and wholly on this ground, and with the very best feelings for Philadelphia itself and its wonderful business advancement, but with little respect for the fairness or honesty of some of the leading papers of that city, it submits the following extracts, which may possibly be of some interest in this connection, and which may suggest to these papers the desirability of ceasing to criticize other places when they have to admit so many shortcomings in their own locality:

[Philadelphia Inquirer, March 25, 1896.]

The tangle which the House committee on naval affairs has got itself into is absurd. The question of dry-docks has consumed a great deal of valuable time. Where the proposition came from that the three dry-docks should be built—one at Portsmouth, N. H.; one at Algiers, La., and one at Mare Island, Cal.—we do not know. Somebody is responsible for it, but whoever it may be, he must have a very poor idea of what is really required. It is well enough to build a dock at Mare Island, for one is needed on the Pacific coast, but what on earth does the country want of one at Portsmouth? And where is Algiers, anyhow, and of what use is it to anybody after it is discovered? Portsmouth and Algiers would be a pair of expensive nuisances. Hasn't the government had enough of this sort of thing with its experiences with Port Royal? When a great warship goes into a dry-dock for repairs, materials should be at hand to do the repairing. The one ideal place on the whole Atlantic seaboard is League Island. There is room here for the entire navy to anchor in fresh water. There is plenty of space for a dozen dry-docks, and everything entering into the construction of a cruiser or battleship can be had almost immediately. To build at Algiers and Portsmouth would be useless, wasteful, ignorant and unpardonable extravagance. No great vessel would enter at either port, but to build at League Island would be to build for all time, for its situation is such and its advantages are so numerous that it must in the end be the great central naval station.

[Rear-Admiral Simpson.]

The presence of a fresh-water river and proximity to supplies are the only tenable grounds advanced by the minorities either of the board of officers or of the congressional committee in favor of League Island.

[Philadelphia Inquirer, March 24, 1896.]

Two more big steamships, one outward bound and one inward bound, are fast aground in the channel of the Delaware river. Newport News, Norfolk and Baltimore are all thriving upon the slow moving efforts to deepen the channel of the Delaware. Some day we will awake to the fact that business and population are leaving us because of the water supply, as they are now leaving us because of the Delaware channel, the banking system and other evils

dences that as a community we look elsewhere for business, commercial and financial leadership.

[Rear-Admiral Simpson, U. S. Navy.]

The majority report of the naval committee on League Island condemns League Island as deficient in the essential characteristics for a good site for a navy-yard, not having an ample depth of water, not having soil fit for solid foundations, not having facility for rapid egress to and ingress from the sea, not free from rapid currents and dangerous obstructions to navigation, and not having a climate free from malarial influences.

[Philadelphia Times, March 25, 1896.]

The steamship Pennsylvania, of the International Navigation Co., which left the Washington avenue dock yesterday morning at 6 o'clock, was unable to proceed any further than Dan Bohn shoals on account of running into a slip of mud. Late last night she was still in the same place. She carries a valuable cargo.

[Chas. H. Cramp.]

To build a steamship in the League Island navy-yard would immediately create a complete demoralization in the private yards of the Delaware—at Wilmington, of Harlan & Hollingsworth and the Pusey & Jones Company; John H. Dialogue's, at Kaighn's Point, and two or three places in Philadelphia, including our own. We do not know why the government of the United States should punish us by demoralizing our business.

Would it not be wise for the Philadelphia papers, in view of these extracts from their own columns and from the testimony of Mr. Cramp and Rear-Admiral Simpson, to give more attention to deepening the channel of their own harbor and to putting their own affairs in order, rather than to expend their energy, as at present, in denunciation of Port Royal and Newport News.

### The South: Its Past; Its Future

Mr. Stuyvesant Fish, president of the Illinois Central Railroad Co., who has done so much for Southern advancement, and who has always given the South full credit for the great work which its own people have done in times past, as well as for what they are trying to do at present, in a personal letter to the editor of the Manufacturers' Record makes a reference to the work of the South, which we take the liberty of publishing. In the course of a letter on the efforts of the South to build railroads in early days, he says:

Anyone who has had to do with the management of Southern railways built before the war, as I have, cannot fail to appreciate the interest which the Southern people took in the development of the country through such means. I doubt if there is, anywhere, such an example as that of the old Mississippi Central Railroad, which was built from Canton, Miss., to Jackson, Tenn., through a sparsely settled country, having but an indifferent soil, and without any conveniences except the fortunes, brains and courage of the promoters living along the line. How they ever managed to get such work done during the years from 1852 to 1859 as I see before me every time I go over the road is a mystery which I have never been able to solve. Bear in mind that they had no land grant, no government aid and but a paltry loan from the State, and there was neither a seaport, nor a manufacturing town, nor a distributing centre, on the whole line. Indeed, there was not a town with 5000 inhabitants on it from end to end.

In what striking contrast is this hearty commendation, from one of the business leaders of America, of the energy of the old South when put alongside of some of the criticisms of the narrow-minded people who know so little of what the South did, and who are unwilling to give it credit for the energy and enterprise which it displayed in ante-bellum days. It is strange that some men are willing to admit that it took four years to conquer a section which, according to their views, had neither energy nor enterprise. How much broader is the man who, like President Fish, freely admits that this great section, peopled by the same Anglo-Saxon race as the North, was a mighty factor in this nation's progress

in the past; that it was because it was inhabited by such a people that it made such a tremendous fight for what it believed to be right, and that now this same people, recovering at last from the overwhelming disasters of the war, will lead the whole country in the final struggle for the advancement of this country to a position in the brotherhood of nations far above all others on earth.

### NASHVILLE AND ITS EXPOSITION.

Views of Gen. I. W. Avery, the Atlanta Exposition's Foreign Commissioner.

[Special Cor. Manufacturers' Record.]

Nashville, Tenn., March 31.

Baltimore and Montreal dropping their fairs, Nashville's Centennial Exposition has the right of way.

And the opportunity is being used with vigor. Nashville means business. It has planned and is doing things on a broad scale. Broad, able men are at the head. They are on their mettle to beat Atlanta, and they are profiting by Atlanta's experience.

Nashville is celebrating the hundredth anniversary of its corporate birthday, and hence the centennial name; but to this fine sentiment it adds a great national and international scope of aim. It is striking boldly for the largest results. It wants to put the South forward as a foremost factor for national progress and strengthen the commercial power of the United States abroad, especially in the Central and South Americans, our continental brothers.

It was found that such an exposition could not be got ready for this year, and so the centennial idea is met by a great inaugural ceremonial on June 1, 1896, while the exposition itself will open May 1, 1897, running six months and escaping the cold of the winter.

The grounds are very fine, and will be in perfect order, with a fine lake, completed walks and grass plats and borders. The construction of the Auditorium, Parthenon, and Commerce, Machinery, Transportation and Woman's Buildings, besides a copy of Andrew Jackson's famous old Hermitage home, is steadily progressing, and the Auditorium, to seat 5000 people, will be ready by June 1 for the inauguration.

This ceremony is to be made a great occasion. Ten thousand soldiers, with fifteen bands, including the Washington musical bands, will parade. The President and Cabinet and the governors and other noted men in large numbers are expected.

Besides the buildings mentioned, the Agricultural, Negro, Minerals and Forestry, Electrical and Live-stock Buildings are to be begun soon, and in addition new structures, such as a History and a Children's Building, are projected.

An invitation has been sent to every nation in the world inviting participation on commercial lines, and showing Nashville's importance as near the geographical and population centre of the United States. The Tennessee congressional delegation is vigorously working for the government to give its stamp of approval to the enterprise.

A most important and valuable feature of this exposition is the general interest taken by the Tennessee counties, which are rallying to the enterprise. It will probably be the fullest display of a State's resources ever made, and it is unique in this respect and a model for imitation.

It is expected a general participation of States will be secured. Already South Carolina, Indiana and New Jersey have signified their purpose to exhibit.

The exposition company is especially strong. The president is Col. J. W.

Thomas, president of the Nashville, Chattanooga & St. Louis Railway, one of the ablest railroad men of the Union, a broad, practical man. The vice-presidents are V. L. Kirkman, of Nashville; W. A. Henderson, of Knoxville, and John Overton, Jr., of Memphis, three very strong men. The director-general is Major E. C. Lewis, a man of unusual energy, with creative and executive qualities. The commissioner-general, Major A. W. Wills, the secretary of the Chamber of Commerce, is a versatile and hustling worker, full of resources. Mr. W. F. Foster, the director of works; J. W. S. Frierson, the East Tennessee commissioner; Robt. Gate, the West Tennessee commissioner; W. P. Tanner, the treasurer; Frank Goodman, the auditor; Leland Rankin, chief of promotion and publicity, a splendid young worker, and S. A. Champion, the general counsel, an able lawyer, are all men of exceptional merit.

The executive committee is very strong, numbering thirty, and consists of the following gentlemen: John W. Thomas, V. L. Kirkman, W. A. Henderson, John Overton, Jr., E. C. Lewis, W. F. Foster, W. P. Tanner, S. A. Champion, W. H. Jackson, H. H. Lorton, J. H. Fall, A. H. Robinson, John Q. McCann, W. L. Dudley, B. F. Wilson, E. W. Cole, H. W. Butteroff, S. J. Keith, Tully Brown, E. E. Barthell, M. J. Dalton, Horace E. Palmer, John W. Thomas, Jr., G. H. Baskette, J. W. Baker, J. H. McDowell, J. Van Derventer, Luke E. Wright, J. C. Neely and Samuel M. Murphy.

The woman's board, under Mrs. Van Leer Kirkman as president, is thoroughly organized and actively at work, and all of the cities of Tennessee are being visited by lady delegates from the board, and enthusiastic co-operation is being organized.

The Nashville press, composed of a very able and enterprising set of journals, is zealously enlisted. The American, a morning journal, and the Banner, an afternoon paper, both among the old-established and best papers of the South, and the sparkling new morning daily, the Sun, are all effective factors of aid, and are united squarely on the exposition.

Nashville in this exposition is running on broad far-reaching lines, and deserves to succeed. It merits the sympathy and co-operation of the good men of the whole country. It is taking up the great work of the Atlanta Exposition, embracing especially Southern expansion, national fraternization and American commercial enlargement and supremacy, and handling them with splendid energy and power. It is molding its enterprise in a singularly independent and original way, modeling after none, creating new methods and ideas and pursuing old things in its own way. Its liberality and unity of sentiment and action have been signally marked.

It has a large advantage over Atlanta in its environment of populous territory tributary to it to support an exposition and patronize it with attendance, contributions of exhibit and money.

Its exposition management, like Atlanta's, is very able, progressive, public-spirited and patriotic.

The exposition is one of those enterprises that the Manufacturers' Record, in following its policy of Southern development, can take hold of, with its power and influence, and help and push for the common public good. I. W. AVERY.

Managers of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises and needing machinery or supplies of any kind will find it profitable to consult the advertising columns of the Manufacturers' Record. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.



## RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the construction Department.]

## Another Georgia Project.

The people of Quitman, Ga., have determined to have another railroad outlet to market, and have organized the South Georgia Railroad Co. to build from Quitman to a point on the Georgia Southern & Florida near Sparks, Ga. The road will extend through Brooks and Berrien counties, and will be about twenty-five miles long. It will place Quitman on the Plant system and give it also a connection with the Southern system. The officers of the company are J. W. Oglesby, president; I. H. Hopson, vice-president; John Tillman, treasurer, and W. Oglesby, superintendent.

## To Enter San Antonio.

A dispatch from San Antonio, Texas, quotes President Henry C. Rouse, of the Missouri, Kansas & Texas system, as saying that the company is now considering the idea of extending the line to San Antonio. Its present terminus is San Marcos, Texas, fifty miles distant. Recently Mr. Rouse, accompanied by Vice-President Purdy and other officials, made a trip by vehicle over the route of the proposed extension. Such an extension has been planned several times, and two routes have been surveyed by the company's engineers.

## Important West Virginia Road.

A dispatch from Clarksburg, W. Va., states that the West Virginia Short Line, which is to be built between that city and New Martinsville, will be about forty-five miles long, passing through the best coalfields from Harrison county, its starting point, to Wetzel county, opening up an entirely new coalfield in which large purchases have already been made. Through Wetzel county the line follows Fishing creek to its mouth at New Martinsville, passing en route the rich oilfields of the last-named county. The engineers report the route a good one; that it has easy grades, and that the line will be a cheap one to construct.

## An Expert View of B. &amp; O.

The probability of a portion of the Baltimore & Ohio forming practically an extension of the Southern system, as has been predicted by the Manufacturers' Record, is discussed by the New York Journal of Commerce as follows:

"Signs multiply that both of the committees may yet play 'second fiddle,' and that the work of reorganizing the great Baltimore & Ohio system may devolve upon Mr. J. Pierpont Morgan's house.

"The suggestion of such an outcome opens up a very plausible line of reasoning. What is to prevent the operation of the Baltimore & Ohio and the Southern Railway (in Morgan property) as a unit, and what is to prevent the voting trustees of the reorganized Reading (of whom Mr. Morgan is one) from giving a New York outlet to the combination? The business of the Southern Railway has always been considered by the Pennsylvania Railroad as one of its most valuable sources of revenue. \* \* It is asserted that the business between the South and the North-west could be handled effectively and economically by a combination of Baltimore & Ohio and the Southern Railway."

This is simply what the Manufacturers' Record outlined two years ago. In the end it will, we think, be found that the Baltimore committee and Mr. J. P. Morgan are working in close harmony. Some of Mr. Morgan's personal friends are on that committee, and we think that the

future will show that these two forces are working together.

## Norfolk &amp; Western Reorganization.

The Norfolk & Western reorganization committee announces its plan for placing the finances of the road on a new basis. The new securities will comprise \$62,500,000 consolidated 4 per cent. bonds, of which \$23,322,675 will be used for disturbed bonds, \$25,986,680 for the purpose of taking up the undisturbed bonds and the balance used for improvements and other purposes. The amount of \$23,000,000 4 per cent. preferred stock is to be distributed among holders of disturbed bonds, and \$66,000,000 on common stock. One-hundred-year mortgage bonds will receive 6 1/2 per cent. in the consols and 7 1/2 per cent. in adjustment preferred stock; Maryland & Washington division bonds, 70 per cent. and 67 1/2 per cent.; Clinch Valley division bonds, 50 per cent. and 70 per cent.; equipment mortgage bonds of 1888, 100 and 45; 5 per cent. debentures of 1892, 100 in adjustable preferred; Roanoke & Southern bonds, 55 and 65; Lynchburg & Durham bonds, 55 and 65. Norfolk & Western adjustment mortgage sevens will receive 7 per cent. cash, 130 in new first consols and 20 in adjustment preferred stock.

## The Southern in North Carolina.

The completion of the Aberdeen & West End road from Aberdeen to Troy, N. C., may result in a new railroad combination of much importance in that State. By constructing a few miles of road from Asheboro, N. C., the Southern Railway Co. could make a connection with the Aberdeen & West End, giving it an entrance into one of the best lumbering and fruit-growing sections of the State. At Aberdeen the Aberdeen & West End connects with another short line, the Aberdeen & Rock Fish, which extends into the lumber district near Fayetteville, N. C. By completing it to Fayetteville the Southern could use these lines in making a connection with the Cape Fear & Yadkin Valley. A dispatch from Asheboro is to the effect that the Southern may build the branch referred to.

## A Water and Land Trip.

In a letter to the Manufacturers' Record Mr. Thomas G. Eger, traffic manager of the Clyde Steamship Co., of New York, states that it intends making a specialty of passenger traffic to and from New Orleans by way of Jacksonville, Fla. Mr. Eger writes: "With our new steamer, Comanche, making the run between Jacksonville and New York in fifty-three hours, and having alternate steamers direct between New York and Jacksonville, we should be enabled to offer the traveling public excellent time over what we consider one of the most agreeable routes for traveling—New York to Jacksonville steamer, Jacksonville to New Orleans rail—making fifty-three hours water and twenty-four hours rail, passengers having the option of taking steamer calling at Charleston."

Such a route certainly offers many inducements to tourists.

## For Shipping Truck.

A number of representatives of the Southern and Pennsylvania railway systems, also the South Carolina & Georgia, have recently visited the truck farms in the vicinity of Charleston, S. C., with the view of giving the shippers special transportation facilities to the Northern markets. It is probable that a fast-freight schedule will be arranged, and that refrigerator cars of the most improved pattern will be used to carry the fruit and vegetables to New York and other Northern cities.

## ILLINOIS CENTRAL IMPROVEMENTS

Over \$1,000,000 to Be Expended for Additional Track, also Terminals at New Orleans.

Regarding the improvements to be made by the Illinois Central at New Orleans and the additional track to be built along its main line, the Manufacturers' Record has received the following statement:

Illinois Central Railroad Co.,  
Office of the Chief Engineer,  
Chicago, March 26.

Editor Manufacturers' Record:

The double-track work we contemplate building this season is about twenty-two miles between Makanda and Dongola, Ill., on the lower end of our Chicago division. We will also construct a number of new passing tracks on the main line between Chicago and New Orleans, as well as several new yards at important division points. The entire work will cost about \$650,000.

In addition to this, the company will expend about \$450,000 for new elevator and wharves and improved track facilities in the city of New Orleans. We have already made all necessary arrangements for the material for such of the work as we will do. Most of it will be done by contract, however, and bids on the different pieces of work are now under consideration. Contracts will be let and the work pushed forward at once.

J. F. WALLACE,  
Chief Engineer.

The Illinois Central's business has been increasing at a remarkable rate during the past two years, and readers of the Manufacturers' Record are aware that it has been one of the principal systems carrying grain from the North and West for export to the Gulf of Mexico. It has also had an extensive fruit and vegetable traffic to Chicago and other Northern cities. It has been forced to arrange for increased terminal facilities at New Orleans, as well as additional track for its business. The improvements referred to by Chief Engineer Wallace will cost \$1,000,000 all told, and give the Central a very extensive increase in shipping facilities, as well as many miles of needed track.

## The B. &amp; O. Receivership

The statement of Receivers Murray and Cowen, of the Baltimore & Ohio, outlining the policy of the company, will be very comforting to thousands of security-holders who were practically in the dark until the statement was first made public through the Manufacturers' Record. The effect in Wall street was known the day after the Manufacturers' Record published the article, when B. & O. stock gained over a point. While the receivership has been in force but a short time, the attitude of Messrs. Murray and Cowen bears out their statements—that they intend developing local traffic, cutting off useless expenses and needless salaries, protecting Baltimore & Ohio terminal business, and, in a word, operating the system for the benefit of its owners, and not of outside corporations or individuals.

As the Manufacturers' Record stated last week, the coal interests are to be given special attention by the appointment of a division freight agent at Clarksburg, W. Va. Mr. E. M. Davis has received this appointment, and his territory extends from Cumberland, Md., to Moundsville, W. Va. Mr. J. A. Murray has been appointed general coal and coke agent for the line, with office at Baltimore. The importance of Philadelphia as a freight-producing territory has caused the appointment of Mr. George J. Lincoln as division freight agent at that point. Mr. Andrew Stevenson is to be commercial agent at Baltimore. The office of engineer of maintenance of way has been abolished and the duties connected with it will be combined with the engineering department.

It is understood that other important changes will be made for the sake of economy and efficiency in the several departments. The receivers, however, will take no further action until they return from a tour of inspection which they are now making of the line.

## Terminals at Pensacola

The Louisville & Nashville Company, according to a report from Pensacola, Fla., has appropriated \$150,000 to extend and improve its dock facilities at that point. The docks are to be built further into deep water, with the view of allowing steamships of the largest size to take on full cargo without lighter service. Already the Louisville & Nashville has established an extensive export trade at Pensacola, which is steadily increasing.

## New Missouri Line.

The Lebanon, Mansfield & Ava Railroad Co., recently incorporated, has completed surveys for a road sixty miles long from Mansfield, on the Kansas City, Fort Scott & Memphis system, to Lebanon, on the St. Louis & San Francisco. In a letter to the Manufacturers' Record Mr. John A. Spurlock, of Ava, one of the directors, states that final surveys have been made, and that actual operations may begin in a few weeks. The road will extend north and south in the southern part of the State, and would form a portion of the proposed north and south system which has been projected from the Missouri river to Little Rock, Ark. J. G. Roote and F. E. Adams, of Mansfield, and George B. Waters, of Ava, are on the executive committee.

## Railroads and Schools.

The broad and liberal policy which is manifested by the Chesapeake & Ohio Company towards the section of country from which it obtains much of its local business has again been demonstrated by its action relative to taxes for educational purposes in Virginia. Although, by a decision of the Court of Appeals, the company is not obliged to pay any such taxes, President Ingalls has instructed Solicitor Witham at Richmond not to discontinue payment in the following letter:

"Dear Sir.—My attention has been called by you to the recent decision of the Court of Appeals of Virginia in the case of the New York, Philadelphia & Norfolk Railroad Co. vs. The Supervisors of Northampton County, involving the power of the board of supervisors to tax railroad property for district school purposes, and I wish to say to you, and through you to the taxing officials of the State of Virginia, that it is not the desire or purpose of the Chesapeake & Ohio Railroad Co. to avail itself of any technicality to evade its due proportion of the public burdens.

"The rate being uniform, all property within the taxing district should bear its like proportion of taxation; and, in consequence of failure to provide machinery for the assessment of district school taxes, such taxes could be temporarily evaded by one species of property, and the burden on the property of others thereby increased, I should not wish to take advantage of such a position. It may be that the county authorities can, by changing the rate of levy for county school purposes, render consideration of this subject unnecessary, or it may be that the general assembly at a future session will have the power to retroactively cure the present want of authority in the board of supervisors in making levy for district school purposes.

"Independently, however, of these considerations, I do not think it wise policy to embarrass the educational system of the State, and I hope it may be the judg-



ment of the other railroads of the State to come to the same conclusion. You will therefore not raise this question in any future tax bills that may be presented.

"Yours very truly,  
"M. E. INGALLS, President."

#### Electric Cars Purchased.

The Columbia & Maryland Railway Co. has given a contract for a portion of its rolling stock. The Barney & Smith Co., of Dayton, Ohio, received the contract, which is for eight combination motor cars forty-three feet long, six closed trailer cars forty-one feet long and ten closed motor cars twenty-eight feet long. The combination cars will have a baggage compartment eight feet six inches long and a passenger compartment to accommodate thirty-two persons. The cars will be vestibuled at each end, will be lighted and heated by electricity and will have centre aisles, cross seats and lavatories. Each will have double trucks, with 36-inch wheels and four fifty horse-power motors. The cars are designed to run at a speed of over sixty miles an hour between Baltimore and Washington.

The City & Suburban Railway Co., of Baltimore, has purchased seventy-five open cars for summer use.

The City Passenger Railway Co., at Baltimore, has also purchased thirty open cars for its summer service.

#### First Transatlantic Line.

The improvements to Galveston harbor have deepened the ship channel to such an extent that the Harrison Line of steamships is to be placed on the route between that city and Europe. This is the first regular transatlantic steamship line to Galveston, and it marks an era in the development of Texas seaports. While this port has had a large foreign trade, it has been mainly during the cotton-shipping season by "tramp" steamers, which ceased their trips at its close. The Harrison Line is controlled by L. & J. Harrison, of Liverpool, England. The Harrisons own thirty-one steamers, whose tonnage runs from 245 to 4400 tons net, and they are constantly adding new vessels. These vessels are built for the accommodation of passengers, both cabin and steerage, and freight. Four cabin passengers recently left Galveston on one of them. The agents say that if there is sufficient demand they will do a steerage business, but much passenger business is not expected at the start.

#### Railroad Notes.

W. H. McClelland has been appointed manager of the St. Louis & Kirkwood Electric Railway.

Mr. W. S. Brantly has resigned his position as secretary and treasurer of the Georgia Southwestern Railroad.

Mr. John M. Walker has been chosen secretary of the Northeastern Railroad of Georgia, succeeding William S. Brantly.

Daniel C. Hedding has resigned his office as assistant freight and passenger agent of the Western Maryland Railroad.

The Plant Railway & Steamship Co. will add twenty-five refrigerator cars to its equipment for transporting fruits and vegetables.

Mr. A. C. Bedford, of New York, has been elected a director of the Ohio River Railroad Co., succeeding Mr. W. P. Thompson, deceased.

The Chester & Lenoir Railroad Co. has recently purchased from the Augusta Southern Railroad of Georgia three locomotives and several passenger and freight cars.

The Southern Railroad Co. reports for February gross earnings of \$1,494,918, an increase of \$233,010, and net earnings of \$430,465, increase \$47,120, and from July

1 to February 29 gross earnings of \$13,451,370, increase \$1,046,780, and net earnings of \$4,384,350, increase \$352,041.

Mr. John D. Potts, division passenger agent of the Chesapeake & Ohio Railway, has been appointed assistant general passenger agent of that system, with office at Richmond.

The Pullman Palace Car Co. has extended its service to the City of Mexico, and a line of Pullman buffet coaches are now running over the Mexican National road to that city.

A dispatch from Norfolk states that the grain trade of the Norfolk & Western Company has reached such proportions that its elevator is to be enlarged from 100,000 to 350,000 bushels capacity.

The Petersburg Street Railway Co. has elected the following officers: President, Edward C. White, of New York; general manager, W. J. Newton, of New York; superintendent, Lyman J. Hart, of Petersburg.

The Seaboard Air Line has established a sleeping-car service specially between Richmond, Va., and Raleigh and Charlotte, N. C. Passengers taking it can leave Richmond at night and reach either of the North Carolina cities the next morning.

The annual report of the Pittsburg, Wheeling & Kentucky Railroad, submitted by President William P. Hubbard to the stockholders, shows net earnings of 8½ per cent. on the capital stock after paying all charges of every character, besides spending the usual amounts for betterments. The freight and passenger traffic of the road shows an increase over any previous year, and was 78 per cent. greater than in 1894.

The Middlesborough Town & Lands Co., Limited, of London, has issued a letter to the stockholders of the company suggesting the organization of a new company to operate the South Boston Iron Works at Middlesborough, Ky. The letter states that these works, which have never been in operation, cost over \$500,000. They comprise one of the largest and most modern machine shops of the Southern States, and are equipped for handling a high class and extensive engineering business. The letter says that the starting of the Watts plant has given new life to Middlesborough; the company has been enabled to lease two hotels and a number of houses; the receipts of the street railway, the electric-light and water companies have increased, etc. The capital required to start the South Boston Iron Works is £30,000. It is proposed to organize a company under the title of the Middlesborough Engineering Co., Limited, with a capital of £100,000, of which £30,000 is to be preference shares for working capital and for the balance due for the purchase money. This plant is so admirably equipped for handling very large business, and especially for work of a heavy character, that its starting up would be an important event in the industrial history of the South.

A dispatch from Middlesborough says, "The South Boston Iron Works will be put in operation as a tool and implement factory. Money has been raised in London to liquidate the old indebtedness and furnish working material. Three hundred men will be put to work."

Messrs. Dasput & Levert, general commission merchants, of New Orleans, desire to secure the agency of manufacturers who may not be represented in that district. They wish to add this to their present business, and being in touch with the sugar and rice planters of the State and the trade generally, they are in a position to handle a large business for the interests which they may represent.

## FINANCIAL NEWS.

### Official Bank Changes.

National Bank of Cambridge, Md.—Wm. H. Barton, president.

Citizens' National Bank of Frostburg, Md.—Thos. Humberston, vice-president.

Mutual National Bank of New Orleans. H. Maspero, president; J. T. Aycock, vice-president.

American National Bank of New Orleans—W. W. Girault, vice-president and cashier.

First National Bank of Russellville, Ark.—S. C. Burgess, vice-president.

Putnam National Bank of Palatka, Fla.—A. E. Wilson, president; Geo. E. Welch, vice-president; P. A. Smith, cashier.

Merchants' National Bank of Jacksonville, Fla.—R. B. Archibald, vice-president.

People's National Bank of Winston, N. C.—John W. Fries, president; W. A. Blair, vice-president.

First National Bank of Hickory, N. C. Clement Geitner, vice-president.

First National Bank of Washington, N. C.—N. S. Fulford, vice-president.

First National Bank of Bridgeport, Ala. R. C. Gunter, president; E. L. Lee, vice-president.

First National Bank of Bluefield, W. Va.—Edwin Mann, president.

Harris National Bank of Terrell, Texas—Jno. H. Corley, president.

First National Bank of Denton, Texas. S. R. Davis, vice-president.

Loan and Savings Bank, Charlotte, N. C.—John E. Oates, president, succeeding S. Wittkowsky.

### New Corporations.

A number of business men at Greenville, Ala., are organizing a bank.

The Carolina Investment Co. has been organized at Columbia, S. C., with \$5000 capital by J. H. Sims, R. A. Blalock and others.

The Bank of Mannington, W. Va., has elected J. M. Tetrick, president, and W. P. Burt, vice-president. It will begin business on May 1.

A company to be known as the Southeastern Fire, Marine & Inland Lloyds is to be formed for insurance purposes, with its main offices at Columbia, S. C. The Carolina National Bank at Columbia is interested.

The Merchants and Farmers' Bank of Woodstock, Va., will be opened for business April 15 under the direction of J. I. Triplett, president; R. M. Lantz, vice-president, and D. P. Magruder, cashier. It has \$50,000 capital.

The Bates-Farley Savings Bank has been opened at Atlanta, Ga., with \$100,000 capital. The officers and directors are: M. L. Bates, president; F. M. Farley, vice-president; W. O. Bates, cashier; directors, Robert Winship, M. L. Bates, F. M. Farley, John A. Miller, W. A. Bates, W. J. Davis, W. S. Bell and R. O. Campbell.

### New Securities.

The city of Portsmouth, Va., will receive bids until April 14 for its proposed issue of \$22,000 in 5 per cent. redemption bonds.

The city of Salisbury, Md., will receive bids until April 15 for \$4000 worth of 5 per cent. building bonds. Address J. D. Price, clerk.

Cape Charles, Va., will sell \$10,000 in 5 per cent. bonds on April 15. Bids will be received until that date. Address G. G. Savage, mayor.

### Interest and Dividends.

The Eutaw Savings Bank of Baltimore has declared a dividend of 1 per cent. in

addition to its annual interest of 3 per cent.

The Coal Consumers' Co., of Charleston, S. C., has declared a dividend of 8 per cent.

The Wilmington & Weldon Railroad Co. has declared a 3½ per cent. dividend to stockholders.

The Columbia Finance & Trust Co., of Louisville, Ky., has declared a 2 per cent. quarterly dividend.

The Farmers' National Bank of Annapolis, Md., has declared a 3½ per cent. semi-annual dividend.

The Southerland Manufacturing Co., of Augusta, Ga., has declared a semi-annual dividend of 3½ per cent.

The Border State Building Association of Baltimore has declared a semi-annual dividend of 2½ per cent.

The city of Baltimore will pay \$36,500 interest on three issues of 6 per cent. and one issue of 4 per cent., due April 1.

Coupons due April 1 on first mortgage bonds of the Blue Ridge Hotel Co. will be paid at the National Bank of Baltimore.

The Hopkins Place Savings Bank of Baltimore has declared a dividend of 1 per cent. in addition to its annual interest of 3 per cent.

The following coupons, due April 1, are payable at the office of the Mercantile Trust & Deposit Co. of Baltimore: Redemption Wm. H. Perot mortgage 6s, Wm. H. Perot mortgage 6s, Catonsville Water Co. first 5s, South Bound Railroad Co. first 5s, town of Wytheville 6s, Trinity College of North Carolina 6s, county of Durham 6s, city of Norfolk 5s, city of Asheville 6s, Raleigh & Gaston, Seaboard & Roanoke and Raleigh & Augusta Air Line Railroad car trust 5s, redemption Raleigh & Gaston, Seaboard & Roanoke and Raleigh & Augusta Air Line car trust 5s, Monongahela Railroad car trust 6s, redemption Monongahela River Railroad car trust 6s.

### Financial Notes.

The Georgia Bankers' Association will meet in Augusta on May 20 and 21.

The Merchants' National Bank of Vicksburg, Miss., it is stated, has arranged to loan the State \$150,000 at 5 per cent. to meet current obligations.

The firm of R. B. Sperry & Co., stock brokers of Baltimore, has reorganized as Sperry, Jones & Co., with R. B. Sperry and Charles H. Jones, Jr., as partners. It does an extensive business in Southern securities.

Messrs. Clapp & Co., the well-known New York bankers and security dealers, have opened an office in Baltimore, with Mr. F. G. Kammer as manager. Clapp & Co. are extensive dealers in Southern stocks and bonds.

At the annual meeting of the Sloss Iron & Steel Co., of Birmingham, Ala., officers and directors were elected as follows: Thomas A. Seddon, president; E. W. Rucker, vice-president; W. L. Sims, secretary and treasurer; George Jamme, general manager. Directors, Thomas A. Seddon, E. W. Rucker, Birmingham; Joseph R. Bryan, E. D. Christian, Richmond, Va.; William E. Strong, W. H. Goadby, J. C. Maben, John A. Rutherford and Henry Morton, New York.

Mr. G. H. Holliday, who was reported in the Manufacturers' Record last week as intending to establish a stove foundry at Middlesborough, Ky., in a letter to the Manufacturers' Record, says: "I am building what I think will be a fine foundry; will make stoves and ranges a specialty; will work fifty skilled hands. The foundry will be in sight of iron, coal, coke and sand—a combination not found in many localities in the country."



## TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

## SOUTHERN COMPETITION.

**The Lawrence Manufacturing Co., of Lowell, Admits that It Cannot Meet the South's Competition.**

The decision two years ago of some of the largest cotton-mill companies in New England to build mills in the South, such as the Massachusetts Mill, at Rome, and the Dwight, at Gadsden, was not more significant of the destiny of the South as the controlling power in cotton manufacturing than the action taken a few days ago by the Lawrence Manufacturing Co., of Lowell. For several years the Manufacturers' Record has persistently insisted that the New England companies manufacturing coarse cotton goods would be compelled to quit that line of business or build mills in the South. Every investigation made by the highest New England authorities has demonstrated the correctness of this position. A few days ago the directors of the Lawrence Manufacturing Co., of Lowell, a company having a capital of \$1,500,000 and operating 120,000 spindles, voted to discontinue the manufacture of coarse cotton goods and to recommend to the stockholders to sell the entire real estate, machinery and plant of this part of their mill, paying back in cash to the stockholders the receipts to the extent of one-half of the capital stock, \$750,000, and to confine their operations hereafter exclusively to the hosiery department of their business. The sheeting department, which is to be closed, now operates about 75,000 spindles.

Mr. C. P. Baker, the treasurer of the company, who recently went South with a view to locating a cotton mill in that section, in an interview with the Lowell Citizen, said:

"We intend to stop the manufacture of cotton cloth at Lowell for good. At present half of our product is hosiery, and the balance is cloth. We intend to keep on manufacturing hosiery. Outside of hosiery, the Lawrence Company has always been a manufacturer of coarse cloths, its largest product being sheeting. The Southern mills have become very large makers of this kind of goods, and we see no hope, with their low wages, of being able to meet it at a profit here. Instead of going there, as some corporations have, or spending a good deal of money here to fit up for the manufacture of fine goods, the directors of the company considered it best to return part of the capital to the stockholders, retaining at Lowell the hosiery business only.

"This crisis has been pending for three or four years, or ever since the South commenced the manufacture of coarse goods largely."

Replying to the question as to what advantage the South has over Lowell in the cost of goods, Mr. Baker stated that it was "from one and one-half to two cents per pound, and this is on account of low-priced labor, which formerly worked at farming." "Their cost of manufacturing," said Mr. Baker, which is the cost of labor, is 30 per cent. below ours, which is due to a very large surplus of help; and as this is nearly all paid for by the piece, it does not make much difference in the cost whether the labor of the South is skilled or not. While the Southern mills do not manufacture enough goods to supply the American trade, they manufacture enough to make the price, and we have to meet it. These goods nearly all go to the West and South. The treasurer of one of the New England mills, who lately returned from the South, in reply to a ques-

tion which I asked as to the amount of surplus labor in the South, said that there was enough to last for generations."

The action of this old-established company, which has been in successful operation for so many years, in deciding to sell its entire equipment devoted to manufacturing sheetings and retire from that part of the business permanently, shows that all that the Manufacturers' Record has ever claimed and ever predicted in behalf of the South and its advantages for cotton manufacturing is now being demonstrated. Ridiculed as the predictions of this paper were for so many years, its statements receiving ten or twelve years ago but scant credit, even in the South, the world is finally being forced to realize by the stern logic of events that this section in producing cotton goods at a lower cost than any other place, is setting the price for the world, and following this the business must inevitably come to the South. It is only another demonstration of the unequalled advantages of this section for manufacturing — advantages which have brought about the fulfillment of our predictions in regard to iron-making, as well as in regard to cotton manufacturing, and of many other lines of industry, as well as of immigration. The South's day is at last dawning.

## A \$250,000 Addition to Mill.

The stockholders of the Anderson Cotton Mills held a meeting at Anderson, S. C., last week, and determined on doubling their plant. This means an increase of capital stock from \$250,000 to \$500,000 and the erection of an addition to be equipped with 17,888 spindles and 600 looms, which is the present equipment in operation. The company is now employing 350 men. Mr. J. A. Brock is president.

## To Build Looms.

The Mason Machine Works, of Taunton, Mass., the well-known builders of cotton-mill machinery, has received from the Northrop Loom Co. a license to build looms containing the automatic filling supply device and warp stop-motion, such as are now being built and sold by Messrs. George Draper & Sons, Hopedale, Mass.

As the Draper looms are constructed very much on the plan of the Mason loom, and as the Mason Machine Works has for over a year been building looms adapted to receive these famous attachments, they are in excellent position to enter at once upon this line of work.

## A 6000-Spindle Water-Power Mill.

Messrs. John Rudasill & Son, of Lincoln, N. C., will erect a cotton mill, as has been reported, and have entered into a copartnership styled the Indian Creek Manufacturing Co. Their purpose is to erect all necessary buildings and develop water-power for a cotton mill with an ultimate capacity of 5000 to 6000 spindles.

Work has been commenced on the water-power development, and it is expected that all preparations will be completed by the early part of next year for the placing of the equipment.

The company is now prepared to entertain correspondence from machinery builders.

## Textile Notes.

Mr. Allen Jones, of Gracewood, Ga., has completed arrangements for the establishment of a cordage factory.

The Marshall Manufacturing Co., of Manchester, Va., is adding forty looms, some cards and other machinery to its plant.

Mr. R. A. Brown states that two cotton mills are secured for erection in Concord, N. C., if the town succeeds in obtaining another railroad.

Mr. W. T. Thurmond, of Harmony Grove, Ga., is endeavoring to organize a company with a capital of \$100,000 to erect a mill of 15,000 spindles and 400 looms.

It is proposed to organize a \$100,000 company to build a cotton mill at Orangeburg, S. C., and Messrs. I. W. Lowman, T. M. Raysor, J. W. Fairey and others are interested.

The Finlayson Hosiery Mills has been organized at Cheraw, S. C., for the establishment of a plant for manufacturing hosiery. Mr. E. V. Finlayson, of Charlotte, N. C., is president.

Mr. Samuel Bransford, of Lynchburg, Va., contemplates the erection of a knitting mill, and is now investigating the subject and corresponding with makers of machinery for knitting.

A special dispatch from Cheraw, S. C., states that Rhode Island parties have closed a deal for the location in Cheraw of a plant for the manufacture of sash-cord, lamp-wicks, corset laces and shoestrings.

Mr. S. T. Jones and associates, of Sweetwater, Tenn., are considering the erection of a cassimere mill, as reported last week. A plant costing from \$50,000 to \$75,000 is proposed. Correspondence with machinery builders is invited.

Mr. W. H. Worsley, Dr. Braswell and associates are trying to secure the establishment of a knitting mill at Rocky Mount, N. C. They propose forming a \$25,000 company, and are meeting with success in soliciting subscriptions.

Mr. John C. Emerson, who has been appointed receiver of the Portsmouth Cotton Manufacturing Co., of Portsmouth, Va., is preparing to have the mill in operation in the very near future. Estimates to equip and complete the plant are now being obtained.

Mr. B. H. Finney, of Atlanta, Ga., is in Birmingham, Ala., endeavoring to interest the citizens in the organization of a \$200,000 cotton-mill company. He proposes the co-operative plan, which has proven such a practical one in different sections of the South.

The Knoxville Woolen Mills' new addition, reported last week, at Knoxville, Tenn., will manufacture warps for the company's own use in the manufacture of jeans. Spindles to the number of 5000 will be installed, and the company is now in the market for same.

The new Selma Cotton Mills Co., of Selma, Ala., has let contract to Thompson Bros., of Birmingham, Ala., for the erection of the necessary building for its mill. The structure is to be two stories high, 74x182 feet, with engine-house 40x57½ feet and boiler-house 41x50 feet.

Contract has been awarded to J. W. Cagle, of Greenville, S. C. for the erection of the buildings for the Abbeville Cotton Mills at Abbeville, S. C. The structure is to cost \$40,233. Mr. J. C. Klugh has resigned as president, and B. F. Bailey will be elected in his place.

The new Lancaster Cotton Mills, of Lancaster, S. C., is rapidly getting ready for operation. The equipment, which is to include 10,000 spindles and looms in proportion, has been bought, excepting electric plant, elevators and sprinkler system. The entire plant will cost about \$160,000; Mr. Leroy Springs, president.

The Cedar Falls Manufacturing Co., of Cedar Falls, N. C., has completed the new addition reported last week. The mill is known as mill No. 2, for weaving, dressing and finishing only, to convert the yarns of mill No. 1. Its capacity is 200 looms, with other necessary machinery; 100 looms now being put in; some of them now at work; will make for the present 40-inch brown sheeting. The capacity of mill No. 1 is expected to be increased with

2000 spindles during the coming season. O. R. Cox is treasurer of the company.

A movement is on foot at St. Louis, Mo., for the formation of a \$500,000 company for the erection of a cotton mill, and the Business Men's League is endeavoring to push the matter to a successful issue. The committee on commerce and manufactures, Mr. L. L. Prince, chairman, is under the impression that there will be no difficulty in raising \$500,000 to build the plant. A committee will shortly be sent to New England to confer with millmen of that section in an endeavor to enlist their capital in the enterprise.

## Charlotte Manufacturers Remembered

A pleasant indication of the good feeling between the New England manufacturers and those of the South created by the visit of the New England Cotton Manufacturers' Association to the South last fall was the presentation last week of an elaborate hall clock to the Manufacturers' Club of Charlotte, N. C. The New England Association was entertained by the Charlotte Club, and as a token of their appreciation the following concerns joined in presenting a \$500 clock to the club: Chas. H. Hutchins, president Knowles Loom Works, Worcester, Mass.; R. Paul Snelling, treasurer Pettee Machine Works, Newton Upper Falls, Mass.; D. M. Thompson, president and treasurer Corliss Engine Co., Providence, R. I.; Stephen Jenks, treasurer Fales & Jenks Machine Co., Pawtucket, R. I.; Eben S. Draper, of Geo. Draper & Son, Hopedale, Mass.; J. M. Russell, Knowles Loom Works, Worcester, Mass.; Frank J. Hale, agent Pettee Machine Works, Newton Upper Falls, Mass.; Geo. W. Stafford, Knowles Loom Works, Providence, R. I.; Frank B. Comins, vice-president U. S. Aerphor Co., Providence, R. I.; James Freeman Brown, of J. H. Lane & Co., Boston, Mass.; George H. Bayne, Carey, Bayne & Smith, New York; Eugene N. Foss, treasurer B. F. Sturtevant Co., Boston, Mass.; A. T. Atherton, treasurer A. T. Atherton Machine Co., Pawtucket, R. I.; A. S. Wattles, of L. R. Wattles & Co., Walpole, Mass.

The clock was presented through J. S. Chambers, vice-president of the club, who referred to the relations between the industrial interests North and South as follows:

"The kind of stimulus we should derive from this event is not unlike that which comes to a young man who receives the first recognition of conscious power. Under the guise of a simple return of a minor courtesy, the leaders of New England cotton manufacturers and the promoters of the largest industrial development in this country, recognize the Southern Manufacturers' Club as the leading organization for the promotion of the growth of these industries, and the city of Charlotte as the centre of such development in the Southern States."

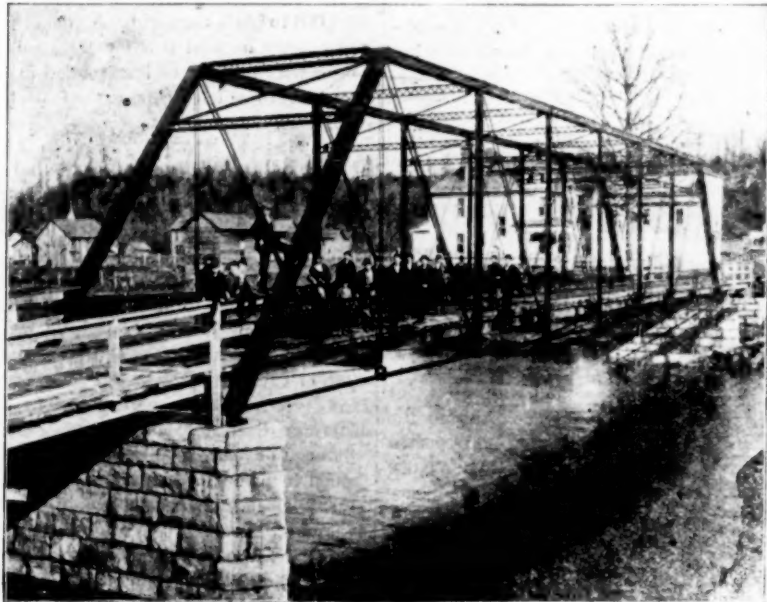
President Chadwick made a graceful and appreciative reply on behalf of the club. He said that the oftener he mingled with friends in the North the more he was impressed with the influence the club was exerting. He said it was the only organization of the kind in the country with the single exception of the Manufacturers' Club of Philadelphia, which, while a powerful organization and including among its members all the leading lines of work in that home of factories, the influence that it exerted was more or less local. On the other hand, the influence of the Southern Manufacturers' Club was felt in the North as well as the South, its membership including not less than six of the names of the donors of this clock. He believed Mr. Chambers was right in saying its presentation marked a new era in the club's history and work.



## MECHANICAL.

### Iron Bridge Construction.

An example of the class of work turned out by Southern concerns is illustrated herewith. Bridge construction is an industry which has a number of advantages where established in the South. This section is paying increasing attention to



BRIDGE AT PARSON'S, TUCKER COUNTY, W. VA.

the improvement of roads. In carrying forward this work modern bridges are a necessity. Engineers have made noteworthy advances in perfecting iron bridges, and wide-awake communities are recognizing the wisdom of adopting them. A Southern establishment recently added a special department to handle this class of work. The illustration shows a bridge located at Parson's, the county seat of Tucker county, W. Va., across the Shaver fork of Cheat river. Strength of construction and neatness of design are features of the work turned out by the West Virginia Bridge Works, Charles Town, W. Va., where this bridge was constructed. Columns, roof trusses and other forms of structural work employed by contractors are also manufactured. The Vulcan Road Machine Co. operates this plant as a department of its works. Considerable business has been secured in Virginia, Tennessee, North Carolina and West Virginia. The works are equipped with the latest type of machinery, and the facilities are ample for handling a large volume of business, including bridges of any design. Railroad switches running into the shops give convenient shipping arrangements. Recently this concern completed a bridge 600 feet long at Harper's Ferry, W. Va. A contract now being executed calls for a bridge 425 feet long.

### Duke Piston Engine.

A type of engine whose lines and features are a departure from the usual style of rotary engine is the Duke double-reciprocating square-piston engine. Being of a distinct design, it is adapted for a number of new uses. Its advantages where a direct-attached engine from one to ten horse-power is desired is bringing it into wide and favorable notice. A summary of the points of advantage is given as follows:

Steam-power in the most compact form possible.

Economy of steam. It is practically the ordinary slide valve double engine in a compact form, with valves set at the most economical point (not a feature about them that is borrowed from the rotary type).

The ease with which they can be applied to any machinery requiring a direct-attached engine.

The few number of pieces that form the working parts of the engine. There is not a bolt or nut inside of the case or piece of any kind to get loose, doing away with eccentricities and all parts connected with them, hence danger of accident reduced to a minimum.

They are shipped from the factory ready to bolt down and set to running. Self-contained in every way, they do not require expensive foundations. In many cases they are set on the floors in upper stories of high buildings, causing no inconvenience and being recommended by those using them for that class of service. The ports are formed to cut off the steam at five-eighths of stroke, and run three-eighths on expansion. This has been determined by the use of a first-class indicator, and the ports of the different sizes of engines made to conform to the best economy without detracting from their power.

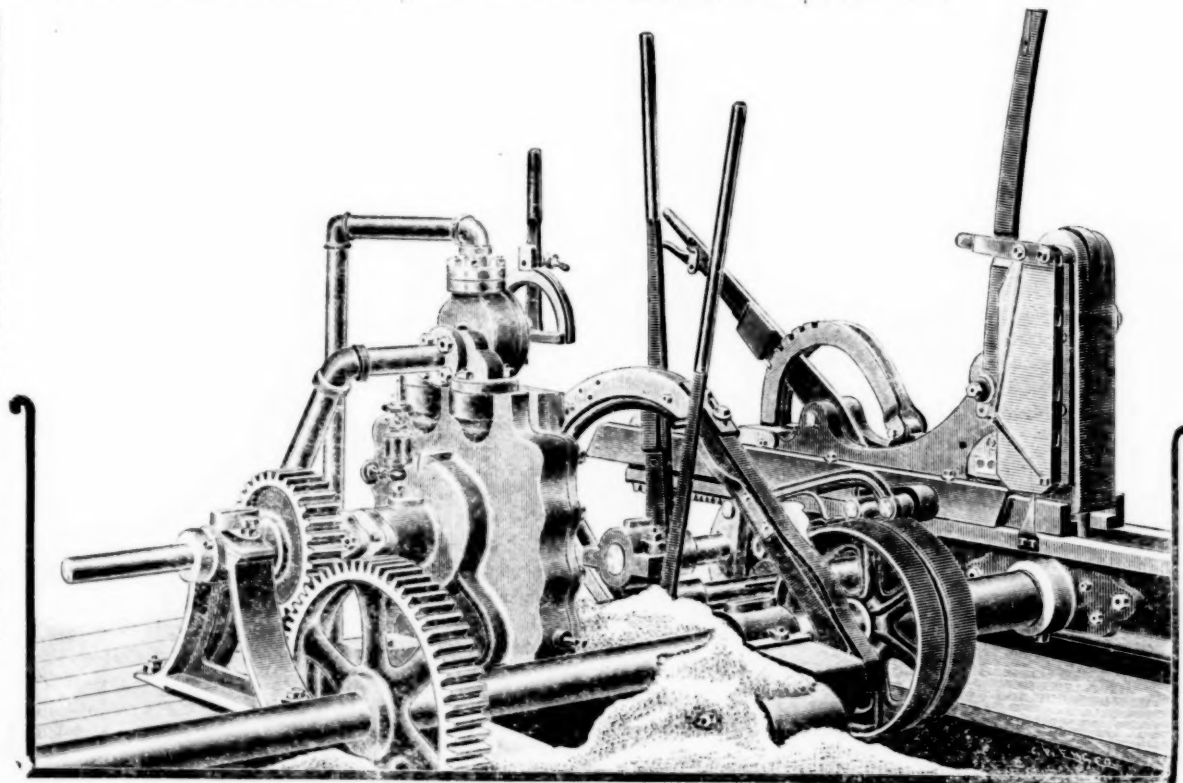
The case encloses a chamber, in which the crank revolves. This is supplied with oil and water from an opening on the back of the case just above the chamber. By this means, it is explained, perfect lubrication to every part of the interior of the engine is secured. Both pistons have a horizontal movement, sliding from side to side, and at the same time the inner piston, to which the crank-pin is attached, has a vertical or up and down movement, the two movements imparting a perfect rotary motion to the crank.

The manner of applying the steam is by channels cast on the cover. These lead down to the centre of the cover, one opening into a central aperture and the other into an annular opening on the inside of the cover. Four channels are cored through the inner piston, one each leading to the top and bottom, and one to each end of the inner piston, the latter also leading through the ends of the outer piston. Four ports corresponding with the channels in the interior of the inner piston are cut through the face (or side next to the cover) of the inner piston in the proper position to register over the central aperture in the cover, the steam entering the port in the inner piston, through the central aperture of cover and resisting against the side of the case, imparts mo-

the cover. The engines are made right or left hand, as desired.

With the reversing engine the channeling on the cover and coring on the piston is the same as in the engine built to run one way, but the ports in the inner piston are shaped so that they register over both the central and annular openings, using each alternately as steam and exhaust. The ports on the top of the case being fitted with a suitable valve which connects the channels leading to the working parts of the engine, motion is given to the engine either to the right or left, as desired. The reversing engine is same as stationary engine, only with reversing throttle instead of governor.

Provision is made for taking up the wear of the working parts of the engine in a simple and effective manner. The inner piston is fitted with phosphor-bronze slides that admit of a thin piece of tin or sheet iron being inserted when the wear is sufficient to allow it. A wedge-shaped plate, on which the lower slide rests, is arranged with set screws on the outside of the case, which keeps the piston steam tight top and bottom. The packing of the cover to the pistons is affected by thin copper joints placed between the edge of the case and cover. The pistons are made so that they are slightly thicker than the case they occupy, and enough copper strips are put in to fill up the space; these joints are removed one at a time as the pistons wear down, and where it is seen that repacking is needed and a copper joint too much to take off at one time, a piece of thin paper to take its place invariably repacks the cover perfectly. The repacking of the cover as above described and replacing the nuts or cap screws as found on the different sizes of engines, evenly is the only point about the engine that requires careful attention and judgment on the part of the person in charge, and repacking is not required except at long intervals.



THE DUKE DOUBLE-RECIPROCATING SQUARE-PISTON ENGINE.

and compactness is a prime consideration. Five years' service at high speeds has demonstrated that these engines are durable and repairs are slight. They are self-contained, and in applying the engine direct to machinery all that is required is to adapt the engine shaft to such machinery by coupling or directly through the machine to be run. The engine complete, with base and governor, supplies a most convenient form for detached service.

tion to the crank, the port passing over the annular ring and exhausting into it after having done its work. As will be inferred, there are four distinct impulses of steam to each revolution of the crank, and the arrangement of the ports to the crank are such that each impulse of steam is given at a point where it has the greatest power. The expansion of steam is secured in the passage of the ports of the inner piston over the central aperture in

There is very little friction, and consequently slight wear on the pistons, from the fact that the steam pressure is inside of the inner piston, instead of against it, making the pistons what might be termed balanced valves.

The bearings for the main shaft and crank-pin are in the form of bushings, and are made from the best quality of phosphor-bronze. From the manner in which steam is applied to the pistons the



wear is slight. When they need renewing the worn ones are driven out and the new bushings driven to place. Any good machinist can do this, and at a small cost to the purchaser.

Good material is used in the construction of this engine. The crank and pin are made from the best quality of cast steel, and shaft, which is machinery steel, is shrunk into the crank in a solid manner. The outer piston is also made from best quality of cast steel. Every part of the interior of the engine is fitted with care. The inner face of the cover and all of the working parts of the engine are ground surfaces, and with tools made especially for the manufacture of the "Dake engine," thus making the engine practically steam-tight from the start. Everything about the inside of the engine is made interchangeable, and can be duplicated in case of accident on short notice.

The Dake square piston engine is recommended wherever a direct-attached engine is needed, at either low or high speeds. They have been thoroughly tested and adopted by leading ventilating-fan manufacturers of the United States, and with dynamos for incandescent lighting they are giving satisfaction.

The application of this engine has suggested a means towards practicable results in experiments made to light railroad trains with electricity, headlights for locomotives and smoke consumers for locomotives. They have been applied in many cases to centrifugal pumps, where the conditions under which they worked were of severe character, and the results obtained were satisfactory. They are strongly built, and so compact and self-contained that the ordinary jar of the railroad train or working of a vessel in a heavy sea does not affect them. Used as a steam feed for saw-mill carriages, they possess special advantages. Considerable interest has been aroused among millmen over this application. The Manufacturers' Record has obtained the views of two concerns employing the Dake engine for this purpose. We have the following letter from A. J. & H. L. Asher, Pineville, Ky.:

"The device we use on our saw-mill carriage is a small reversible engine, which we use for running the blocks or knees back and forth as we are cutting lumber. A pinion is attached to the shaft that runs the knees, and the engine is attached to this by means of a pinion; thus the knees are run either way by means of the engine, which is far ahead of any device we have yet seen. We frequently saw a log with from 1500 to 2000 feet of lumber in it, and with the old style of a lever only, to shove this mass of timber it took more than one strong man to do it, whereas with the engine he opens the throttle part way and uses the lever in one hand, thus setting the thickness of the lumber without wasting any time, and doing it as easily on large logs as on small ones. It is a great thing, and we would not be without it. We think it increases the cut of the mill, besides the saving of strength and muscle to the setter."

T. J. Asher & Sons, Wasioto, Ky., write as follows:

"We have one of the Dake Engine Co.'s engines on our carriage, and we would not by any means do without it for ten times its cost. We have never seen anything on a carriage that anything like equals it. We only use it for the purpose of receding the headblocks back and forth. It does the work quick and in good shape."

#### Hunt Coupling for Transmission Rope

The rapid increase in the transmission of power by rope has made prominent one of the minor difficulties attending its use. This is the gradual lengthening of

the rope which increases the sag until it becomes necessary either to resplice the rope or to use a take-up sheave with a very long range of motion. Rapid wear of the rope from slipping on the pulleys is frequently caused by lack of sufficient tension.

The Hunt rope coupling, which we illustrate, is designed to do away with all necessity for resplicing, etc., as it will keep a rope at exactly the right tension for the most effective service and long life, and do this with little or no extra time or attention being given the matter, and with no expense other than the first cost of the coupling. The device is made wholly of aluminum bronze, and has a tensile breaking strength of 60,000



FIG. 1 Hunt Rope Coupling Before Being Adjusted on the Pulleys.

pounds to the square inch, and an elongation of 20 per cent. in eight inches, which is equal to the strength and toughness of mild steel. It is very simple in its construction, there being but two parts, consisting of a screw and socket. These screw together when the rope is first put on the pulleys and lock securely, so that the coupling can be separated only by using a wrench of special design.

A very important and interesting feature of the coupling when screwed together is an internal swivel and ratchet, which we show in Fig. 3. The swivel permits the joint to yield to the curvature of the pulleys, while the ratchet holds the parts from revolving on each other and untwisting the rope.

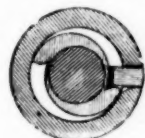


FIG. 2 Hunt Rope Coupling Mounted in the Drive.

The Hunt coupling is made smaller in diameter than the rope with which it is used, in order that it may not touch the grooves of the pulleys, even when the rope is worn.

The rope of the correct length for the drive when connected up is spliced into the coupling, and as it wears longer more "turns" are put into it by revolving one part of the coupling, the ratchet automatically holding all secure when the rope has the proper length and tension.

Where several independent ropes run side by side on a pulley, all can be kept at the same tension with the greatest exactness by putting a few more turns in the slack one when such a condition is no-



ted. By using this coupling in a multiple rope drive, any single rope can be taken off in a few minutes, and the work done by the remaining ones until it is convenient to put on a new rope, which can be done with equal dispatch, and, what is of greater importance, the tension adjusted to correspond exactly with the other ropes.

The cost of a rope drive, with this coupling spliced in and installed position on the pulleys, is usually less than that of ropes spliced on the spot by the purchaser in the ordinary manner, and it is also less than a rope drive with a tension pulley, which, in addition to its cost, frequently requires space that is useful for other

purposes. When we consider that a rope requires to be spliced two or three times during its life, while the couplings, having no wear, are permanent, with no further expense after once installed, it will be seen that this method is much cheaper as well as the better one.

The advantage, both in the convenience of installation, the facility of adjustment of tension, the perfect control of the sag and the increased life of the rope from a more equal tension, are sufficient to justify an expenditure of many times their cost.

The C. W. Hunt Co., 45 Broadway, New York city, is the exclusive licensee in the United States for the patent on this coupling, and is prepared to furnish trans-

mission rope of the well-known "Steve-dore" brand and of the usual sizes, with the couplings spliced in position.

#### A Department of Manufactures and Commerce.

The Milner & Kettig Co., machinery manufacturer and plumbers' supplies, Birmingham, Ala.: "The suggestion of the Manufacturers' Record that Congress create a Department of Manufactures and Commerce appears to me to be a most excellent one, and would be a very important step towards securing a larger share of the world's commerce by the manufacturers of the United States. Exports of manufactured goods from the United States are already of considerable magni-

tude, and increasing yearly. Almost without exception American-manufactured products are more complete, more ingenious, less complicated and generally more desirable than similar articles made in other countries. If, with these advantages, we can sell our goods as cheaply as others, of which I think there is no doubt, we only need a little information as to the requirements of the outside world (which the department suggested would furnish) to be masters of the situation. I think this department should be a bureau of general information in regard to foreign commerce and kindred subjects, such as the classes or grades of goods demanded in the different parts of the world; what, if any, changes or modifications of our manufactured articles would enhance their value or cause them to meet with more ready sale; foreign methods of doing business; prices paid; laws governing commerce and collections of accounts; what advantages we enjoy or disadvantages we labor under, if any exist, as compared with manufacturers of other nations; what lines might be advantageously introduced, etc. It might also furnish information in regard to certain foreign concerns organized for the purpose of swindling their creditors, and on many other subjects not necessary here to mention."

H. L. Story, Altadena, Cal.: "In reply to your inquiry concerning the advisability of Congress creating a Department of Manufactures and Commerce, will say I am in hearty accord with that idea, and while at Chicago worked and voted for the passage of the resolution relating to the subject. It seems to me to be the

first practical step towards a successful competition with English methods in this direction. We are now handicapped, as a nation, by the fact that we have no organized method for reaching out for the trade of the world. Notwithstanding this condition of things, we have become the greatest manufacturing people on earth. The opportunities that would be open to us by the creation of this department could not but have the most salutary effect in stimulating our manufacturing and commercial interests. The renewal of our shipping interests and the building of the Nicaraguan canal would unquestionably follow. The possibilities opened up by the careful study of that subject are so far-reaching, the possible beneficial results to the nation at large so manifest, that I do not know how Congress can well avoid the issue."

Flush Tank Co., Chicago, Ill.: "We are in favor of anything which will tend to bring the balance of trade in favor of the United States, and we believe that such a department as you suggest would be of great value not only to manufacturers, but to the whole country."

The Peck-Snead Co., warm-air heating, ventilating and sanitary engineers, Cincinnati, Ohio: "We are heartily in sympathy with your suggestion that Congress should create a Department of Manufactures and Commerce, for we think that everything possible should be done to assist the country in extending its commerce, and we do not know how it can be better done than by creating such a department and having it managed in a business-like manner."

Washington Correspondent Baltimore Catholic Mirror: "Mr. Richard H. Edmonds, editor and manager of the Baltimore Manufacturers' Record, has been a pioneer writer for many years. He has done more to bring the South to the world's attention than any other man, and, under better general financial conditions, his predictions about Southern progress and development would be more than fulfilled. I admire the stout, gallant fight he makes in these stringent and discouraging times for material progress in his favored section and the whole country. All he needs to secure embarrassment of personal reward for such tremendous application is a return of rising prices and abundant money flowing in all the veins of commerce and trade. Just now, Mr. Edmonds must be gratified that his suggestion for the institution of a government Department of Commerce and Manufactures has found not only warm commendation in many high quarters, but a powerful and practical advocate in Senator Frye, of Maine. I am afraid that the peculiar character of Secretary Morton has prejudiced people against new departments, but Mr. Morton's eccentricities have not prevented the Agricultural Department from being of immense benefit. The Secretary is a man of ability, and only wanting in diplomatic tact. He is one man, and probably will, a year hence, be farming quietly in Virginia instead of Nebraska, and might not even disdain a package of seed sent under Senator Vest's frank. We may not see his like again. Mr. Edmonds's argument for this new department is inextinguishable, and certainly facts and figures show that, great as our agricultural wealth is, it cannot match, by a large deal, our commercial and manufacturing opulence. For my part, I hope that the new department proposed may become an actuality."

Mr. William Hust, of Hustburg, Tenn., in a letter to the Manufacturers' Record states that an excellent opportunity to obtain ample water-power is afforded in that locality by a fifty feet waterfall on the Buffalo river.



## LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

## Lumber Directory.

Readers of the Manufacturers' Record who may be in the market for lumber of any description are recommended to the directory of Southern lumber manufacturers and dealers which appears among the advertising pages.

## CYPRESS LUMBER.

**The Market for It Continually Widening—Its Sale Strongly Promoted.**

The rapidly-increasing use of cypress lumber proves that this variety has become one of the staple articles in building material. As it is distinctively a Southern product, like many other good things which come from the South, it has had to force its way into public notice, and the fact that it has an extensive and continually-widening market today is doubtless due to the energy of the concerns which handle it. Experienced lumbermen well know its good qualities, and the pine-lumber people of the North are aware that it is an active competitor of their timber which must now be recognized.

Thanks to excellent organizations which are now maintained by the principal cypress-mill men along the Atlantic coast and in Louisiana, competition which might cause ruinously low prices is being avoided, and, according to recent reports, this particular industry seems to be in a fairly prosperous condition, with bright prospects for the future. In a recent letter relative to the present status of the cypress business, Mr. E. J. Marsh, of Georgetown, S. C., secretary of the Atlantic Coast Cypress Association, writes as follows to the Manufacturers' Record:

"The association is in a harmonious and substantial condition, and the results of our co-operation is now apparent in the markets of the East. It is the aim of the organization to spread knowledge of the wood, and information as to the uses for which it is most applicable, throughout the United States and Europe. It appears to us that the maximum production is about attained, and most of the available forests of cypress in the country are in the hands of the manufacturers; so the proper means to obtain a higher range of prices will be to widen the market and increase the consumption.

"When you consider that cypress has only been before the public for a very few years, it is reasonable to suppose that it meets the requirements of the trade, and has been accepted as a factor in the lumber markets of the country. Nine out of ten users of this lumber have substituted it for white pine, and in no instance that we know of has the result been anything but satisfactory to the consumer. It is true that the great incentive so far has been the difference between the prices for these two woods, which is \$15 to \$20 per M, and it has proved equal in all places, and superior for many purposes, to white pine. The scarcity of white pine uppers precludes the possibility of that grade depreciating; so we have great hopes that cypress will attain a price more consistent with its higher merit than that prevailing today.

"This association has the utmost faith in the future of the wood, and though it takes quite a considerable fortune to embark in the industry, the business is in hands strong enough to carry their convictions to the end. The organization of manufacturers above indicated is a step in this direction."

The Atlantic Coast Association, which Mr. Marsh represents, includes the Butters Lumber Co., Hub, N. C.; Santee

River Cypress Lumber Co., Ferguson, S. C.; Cypress Lumber Co. (Fred. M. Stearns), Boston, Mass.; C. E. Tufts Lumber Co., Mt. Dora, Fla.; Mohr-Weil Lumber Co., Abbeville, Ga.; Carabelle Land & Lumber Co., Carabelle, Fla.; Franklin County Lumber Co., Carabelle, Fla.; T. J. Tilghman & Sons, Palatka, Fla.; T. C. Sowden Cypress Lumber Co., Ocala, Fla.; Wilson Cypress Lumber Co., Palatka, Fla.; Hilton & Dodge Lumber Co., Darien, Ga.; Gardner & Lacey Lumber Co., Georgetown, S. C.; Hodges & Godfrey, Buffalo Bluff, Fla.; O. N. Taylor & Co., Brunswick, Ga.; Geo. Officer & Co., Port Harrelson, S. C.; Hillsborough Cypress Co., Tampa, Fla.; Suwannee Canal Co., Folkston, Ga.; H. B. Short, Lake Waccamaw, N. C.; Panasoffkee Cypress Co., Panasoffkee, Fla.

The fact that large tracts of cypress timber exist in Louisiana is familiar to all readers of the Manufacturers' Record. In August, 1895, this valuable product was referred to in an article, which is so appropriate in the present connection that portions of it are reproduced as follows:

"The immense cypress forests of Louisiana have existed for unknown ages, but it is only within a few years that the lumbermen of the country have begun to appreciate their value and to make large inroads upon them. While the white-pine forests of Maine, of Wisconsin and other States bordering the great lakes of the West supplied all the demands for consumption Northern dealers and consumers did not look elsewhere for their supplies, but as these vast stores diminished until practical men saw that the beginning of their end had come and that ultimately some other lumber must be found to take its place, they began to search the country for this needed substitute. As in other sections where cypress exists, it was found to be a most excellent substitute for the pine. Louisiana cypress has a very handsome natural grain, and while it is as easily worked as white pine, yet it is a trifle harder, and consequently partakes of the finest finish. Its lasting qualities are universally known, and no wood will shrink or warp less or hold its place better than Louisiana cypress.

"For regular stock doors it is now being manufactured by the leading sash and door manufacturers, and in some instances the larger mills are manufacturing more of them than of white pine, and when the panels are sorted these doors bring from 10 to 15 per cent. premium above white pine. A number of these manufacturers are also beginning to make cypress sash and blinds. While this branch of the business has not yet been developed on a large scale, yet on account of its known adaptability for outside work there is no doubt but what in time the manufacture of cypress sash and blinds will exceed even that of doors.

"Cypress has long been known as the wood for tanks and cisterns. Railroad companies, brewers and distillers are almost universally using cypress for this purpose. Cypress shingles have been in use in this territory longer than any other, and some roofing of a hundred years old can be pointed out. For beveled siding and porch floors there is nothing that excels cypress, as it does not rot, and takes paint better than any other wood used for this purpose, not even excepting white pine.

"Cypress is akin to cedar, and in fact is a water cedar, and while it is comparatively odorless, yet it is distasteful to vermin, and on this account alone it is invaluable and is destined to be used largely in the future for interior finishing, especially in the larger cities in tenement and apartment-houses, hotels, stores, etc. Greenhouse manufacturers have universally adopted cypress for their use, and from

what has been said above regarding the nature of the wood the cause of this can readily be seen. During the past five years the manufacture and use of cypress has increased fourfold."

## LUMBER MARKET REVIEWS.

## Baltimore.

Office Manufacturers' Record,

Baltimore, Md., April 2.

The local lumber market continues in the same quiet channel, and business is reported dull, with no prompt demand, and prices steady, with stocks ample for all requirements. In fact, the supply of yellow pine is excessive in character, and the wharves and docks are piled up with cargoes, which are offered at extremely low figures. Box factories and planing mills are not buying large lots, and from other sources the inquiry is light. In kiln-dried North Carolina pine there is some business doing, and several large orders have been filled for out-of-town buyers. There is very little doing in white pine, and prices are steady and unchanged. The hardwood market shows no material change. While there is some out-of-town business doing, the total of trade is light. There is very little doing in export, as the advices from Europe report market overstocked, and shippers have no disposition to chance the market abroad in its present state.

The following list represents the prices current at this date:

[The quotations for yellow pine are for cargo lots, and for all hardwoods the figures indicate values for choice car lots.]

VIRGINIA AND NORTH CAROLINA PINE	
5-10 No. 2, kiln dried,.....	\$16 00/18 00
5-12 No. 2, kiln dried,.....	17 50/18 50
4-10 No. 1, kiln dried,.....	15 50/16 00
4-12 No. 1, kiln dried,.....	16 00/17 00
4-4 nar. edge, No. 1, kiln dried,.....	13 00/14 00
4-4 wide edge, No. 1, kiln d'd,.....	17 00/18 00
6-10 & 12, No. 1, kiln dried,.....	23 00/24 00
4-4 No. 1 edge floor, air dried,.....	13 00/14 00
4-4 No. 2 edge floor, air dried,.....	10 00/11 00
4-4 No. 1 12-in. stock, air dried,.....	14 00/15 00
4-4 No. 2 12-in. stock, air dried,.....	12 00/13 00
4-4 edge box or rough wide,.....	8 50/9 50
4-4 edge box do. (ord. widths),.....	7 50/8 50
4-4 edge box do. (narrow),.....	6 50/7 50
4-4 12-in. or rough wide,.....	9 50/10 00
3/4 narrow edge,.....	7 50/8 50
3/4 wide,.....	7 50/8 50
3/4 10-in. stock,.....	8 00/9 00
Small joists, 2 1/2-12, 14 and 16 long,.....	8 50/9 00
Large joists, 3-16 long & up,.....	9 00/10 00
Scantling, 2x3-16 and up,.....	8 00/9 00

WHITE PINE.	
1st and 2d clear, 4-4, 5-4, 6-4 and 8-4,.....	48 00/50 00
3d clear, 4-4, 5-4, 6-4 and 8-4,.....	43 00/44 00
Good edge culls,.....	14 00/15 00
Good stock,.....	16 00/17 00

CYPRESS.	
4-10 No. 1,.....	20 00/21 00
4-10 No. 2,.....	14 00/15 00
4-10 16 feet, fencing,.....	12 50/13 50
4-10 8, rough,.....	9 00/10 00
4-4 rough edge,.....	9 50/10 00
4-4 edge, No. 1,.....	18 00/19 00
4-4 edge, No. 2,.....	12 00/13 00
Gulf, 4-4, Nos. 1 and 2,.....	28 50/30 50
Gulf, 6-4, Nos. 1 and 2,.....	31 50/32 50

HARDWOODS—WALNUT.	
5-8, Nos. 1 and 2,.....	65 00/75 00
4-4, Nos. 1 and 2,.....	80 00/90 00
5-4, 6-4 and 8-4,.....	85 00/95 00
Newell stuff, clear of heart,.....	85 00/100 00
Culls,.....	20 00/30 00

OAK.	
Cabinet, white and red, Southern, plain-sawn and good, 1 and 2, 8 inches and up, 12 to 16 feet long, 4-4,.....	30 00/34 00
Quartered white, Western, 1 and 2 quality, all figured, 6 inches and up wide, 4-4,.....	53 00/55 00
Culls,.....	10 00/15 00

POPLAR.	
Nos. 1 and 2, 5-8,.....	24 50/25 50
Nos. 1 and 2, 4-4,.....	28 00/30 00
Nos. 1 and 2, 6 and 8-4,.....	32 50/33 50
Culls,.....	13 00/16 00

SHINGLES.	
Cypr., No. 1 h'ts, sawed, 6x20,.....	7 25/7 75
No. 1 saps, sawed, 6x20,.....	5 50/6 50
No. 1 hearts, shaved, 6x20,.....	6 50/7 50
No. 1 saps, shaved, 6x20,.....	5 25/5 50

LATHS.	
White pine,.....	2 70/2 75
Spruce,.....	2 15/2 25
Cypress,.....	2 15/2 25

## Savannah.

[From our own Correspondent.]

Savannah, Ga., March 30.

An active market has ruled at this port during the present month, and for the week just closed the volume of business has been good in nearly all branches of the lumber industry. The general market throughout this section of the State shows considerable improvement, and at Brunswick, Darien and other lumber

centres the movement is now of considerable volume. At Cordele, on the 27th ult., about 75 per cent. of the saw-mill and planing-mill interests of the State was represented at a convention held in that city for the purpose of organizing the Mutual Lumber Association of Georgia. The convention continued its sessions until nearly midnight, resulting in a permanent organization under the above name, with a full board of directors. The organization is for the purpose of arranging a schedule of grades and prices, to apply to planing-mill stock especially, and to stop the cutting of prices in competition for business. The demand at Cordele for lumber in dimension sizes is good, and especially so from the East. The demand for planing-mill stock has materially fallen off. In the local market prices continue to rule low, but are very firm at the following quotations: Ordinary sizes, \$11 to \$12; difficult sizes, \$13 to \$18; flooring boards, \$15 to \$22; shipstuffs, \$16.50 to \$20, and sawn ties, \$10. The following vessels cleared with lumber cargoes during the week: Schooner Mary B. Baird with 358,442 feet of pitch-pine lumber and 237,657 feet of crossties, and schooner John G. Schmidt with 351,877 feet of lumber, both for Philadelphia; the schooner Charles K. Buckley for New York with 402,550 feet of lumber; schooner Waltham for Boston with 423,553 feet of lumber, and Katie J. Irelan for Baltimore with 455,941 feet of lumber. Boston steamers carried 160,900 feet of lumber, Baltimore steamers 129,650 feet, New York boats 98,620 feet. Additional clearances on Saturday were: Schooner Redwing for Philadelphia with 310,000 feet of pitch-pine lumber, and schooner John E. Deering for the same port with 370,605 feet. The schooner Julia A. Warr cleared for Fall River with 154,689 feet of pitch-pine lumber. The market for freights is steady, with rates not materially changed. The rates from this and nearby ports in Georgia are quoted at \$4.25 to \$5.50. The charters reported in New York during the past week were as follows: A schooner, 321 tons, from Savannah with lumber to Chester and Philadelphia at \$4.25; a schooner, 793 tons, from Brunswick to Philadelphia with crossties at 14 cents; a schooner, 539 tons, from Savannah to Philadelphia with ties, \$11.75, discharged and free wharfage, and a schooner, 488 tons, from Darien to New York with lumber at \$4.50.

## Jacksonville.

[From our own Correspondent.]

Jacksonville, Fla., March 30.

The movement in lumber during the past two weeks at this port has been quite pronounced, and the general demand during the month has been fairly active. A prominent manufacturer, in discussing the situation, stated "that the future of the yellow-pine market was bright; that prices were advancing, and the mills in the South full of orders." The mills in this section are well supplied with orders, and some are running night and day. Four cargoes of lumber shipped during the past week amounted to 1,500,000 feet and 2,191,000 shingles, the largest ever shipped from this port, and show the advantage of deepening the channel of the river. Among the clearances reported during the past week are the following vessels: Steamship Comanche for New York with 425,000 feet of lumber, 2700 bundles of shingles, 3000 crossties and other merchandise; steamship Iroquois for New York with 250,000 feet of yellow-pine lumber, 3000 crossties, 2500 bundles of shingles and other cargo; schooner Sarah E. Douglass for Nassau, N. P., with 30,000 feet of yellow-pine lumber and other cargo; schooner Priscilla Scribner for Philadelphia with 340,000 feet of



yellow-pine lumber; schooner J. S. Hoskins for Washington, D. C., with 1,396,000 cypress shingles; schooner Josephine for New York with 315,000 feet of cypress lumber and 85,000 shingles, and schooner Nathan Cobb for New London, Conn., with a cargo of 500,000 feet of yellow-pine lumber. The schooner Florence Liland cleared for New York on the 27th inst. with 275,000 feet of yellow-pine lumber, and the schooner Thomas Winsmore for Philadelphia with 320,000 feet of yellow-pine lumber. The only charter reported in New York last week was a schooner, 446 tons, from Jacksonville to Portland, Me., on private terms.

#### Pensacola.

[From our own Correspondent.]

Pensacola, Fla., March 30.

Prospects are very encouraging for a good business this summer, and the market at this port for lumber and timber shows indications of greater activity as the season advances. There is a large list of vessels "up cleared and sailed" for this port, and a number of cargoes will go out during the season. There are a number of improvements projected here, and the building of warehouses and grain elevator and contemplated improvements by the Pensacola Terminal Co. will all have a tendency to enliven trade and place money in circulation. The timber market has been fairly active during the past week, a number of sales having been reported. The market opened with sales at 10½ cents, and later in the week sales were made at 11 cents, the range being for the week 10½ to 11 cents, the outside figure ruling at the close. Among the sales reported was a lot of sawn timber, 67-foot average, which sold at 10½ basis. Holders of spot stock are very firm in their views, and seem unwilling to sell below 11 cents. The Gulf Coast Lumber Co. met at Mobile last week and discussed the revised price-list and its adoption. The grade known as Rio schedules was reduced 50 cents per thousand feet. There is considerable activity in milling circles at points in this section of the State and in Alabama. At Milligan the Milligan Mill Co.'s planing mill is nearly ready for operation, the boiler having arrived and will be put in place at once. The company is arranging to put in a dry-kiln, which will be a paying addition to its plant. The following vessels are reported cleared and sailed during the past week: Ship Australia for Greenock with 74,000 cubic feet of sawn timber and 19,000 feet of lumber; bark Prospero with 4800 oak staves, 1000 cubic feet of sawn timber and 310,000 feet of lumber for Palermo for orders; bark Luz for Bilbao with 180,000 feet of lumber; ship Leonora for Liverpool with 104,000 feet of poplar lumber, 157 walnut logs, 3000 oak staves and other merchandise; bark Razeto for Antwerp with 4041 cubic feet of sawn timber and 357,000 feet of lumber; bark Saga for Delfzyl with 31,050 cubic feet of sawn timber; bark Inhana for Nice with 25,729 cubic feet of sawn timber and 20,000 feet of lumber, and steamship Teriotdale for Liverpool with 127,242 cubic feet of sawn timber and 713,000 feet of lumber. Freight rates are steady, with rates unchanged. For United Kingdom and Continent 90/ to 92/6 for large, and 95/ to 100/ for small vessels; for River Platte, \$12 to \$12.50, \$2 form, and for Rio Janeiro, \$13.25 to \$13.50 net.

#### Mobile.

[From our own Correspondent.]

Mobile, Ala., March 30.

The market during the past week has shown a fairly active tone, and business has been well distributed. The movement in timber has been very active, and the market is firm and prices well maintained. Sawn timber, when placed upon

the market, will bring 11 to 11½ cents per cubic foot, 40-foot basis, and contracts are made at the same figures. The demand for cypress is fair at 5 to 8 cents per cubic foot, according to average. There is a limited demand for cedar, and prices are steady at 20 to 30 cents per cubic foot. Saw logs delivered at mill are quoted \$5 to \$7 per 1000 feet. Hewn timber will bring 12 cents on basis of 100 cubic feet, average B1 good, and contracting at same figure. Hewn oak by contract 15 to 18 cents per cubic foot. The market for yellow-pine lumber is firm, with a good demand from the usual sources. The total exports of lumber from this port since September 1 amount to 36,267,498 feet, against 37,138,329 for the corresponding period in 1894-95. The Gulf Coast Lumber Co. met here last Tuesday, there being eleven mills represented. The prices of resawn lumber were discussed at length and many suggestions made, but no action was taken. A committee was appointed to revise the proposed price-list and report at the next called meeting. Among the shipments during the past week the following vessels were reported: Ship Marguerite for Liverpool with 52,462 cubic feet of hewn timber, 18,260 cubic feet of sawn timber and 25,450 feet of lumber; bark Arrilla for the Tyne, England, with 66,000 cubic feet of sawn timber, 5160 cubic feet of hewn timber and 10,000 feet of lumber; bark Sherwood for Sharpness, England, with 11,867 cubic feet of hewn timber, 47,928 feet of sawn timber and 20,831 feet of lumber; bark Airo for Conway, Wales, with 22,668 cubic feet of sawn timber and 64,983 feet of lumber. The schooner Kenney cleared for Porto Cabella, Ven., with 250,300 feet of lumber. Among the charters reported in New York last week were the following: A British bark, 540 tons, from Mobile to Rio Janeiro with lumber at \$13.50 net; a Norwegian ship, 1748 tons, from Mobile to the United Kingdom or Continent with sawn timber at 90/ and hewn 28/.

#### Beaumont.

[From our own Correspondent.]

Beaumont, Texas, March 30.

The lumber business in this section of the State is holding up remarkably well under the recent adverse weather conditions, and the market here during the past week has been very steady, with considerable activity in the general demand. A permanent improvement seems almost assured, as the demand comes from points within the State the nature of which in many cases is more or less urgent. Timber bills are in good demand, and the mills are now busy sawing cross-ties, while the export trade is good, and shippers have at present as much business as they can handle. The Journal, in reviewing the market, says: "The demand for all classes of lumber continues good, and it begins to look as if the revival would be permanent. The requirements of dealers are such that in two weeks' time the shipments will have been heavy enough to show ill-assorted stocks; in fact, some of the larger mills are even now inquiring of neighbors for certain sizes and lengths with which to fill orders demanding immediate shipment." The movement in shingles is active, with prices firm at quotations. Log stock at the mills in this city has run down considerably during the past week, but timber at the moment is in good supply, having been put into the river at the log dump three miles above here. A decided improvement is reported at Orange, and the market is active, with a good demand for yard stock. The schooner Flora Woodhouse arrived at Sabine Pass loaded, and cleared for Vera Cruz with lumber from the Lucher & Moore Lumber Co., consigned to the harbor improvement company at that port.

Capt. C. J. Edwards came up from Sabine Pass on Saturday. He turned over to the government the Sabine Pass channel, having fully completed the contract. The channel is now 100 feet wide at the narrowest point, and twenty-five feet four inches deep all the way across, making this harbor ahead of anything on the coast.

#### St. Louis.

[From our own Correspondent.]

St. Louis, Mo., March 31.

The inclemency of the weather during the month just closing has restricted the volume of business in the lumber market here as well as at adjacent points in this and other States. The spring trade is consequently very backward, while dealers have not had a good showing for the proper development of trade. In yellow pine, however, there has been an improvement in the demand recently, and during April a decided activity is expected. Manufacturers are generally very firm in their views, and refuse to make concessions in any case, while millmen generally are aiming for a higher range of values, which, under the existing demand, would be well maintained. White pine is in good demand, with a very favorable outlook, orders coming in rather freely. The country trade will likely handle a large line of this material this season, and are sending in a number of good orders. In the hardwood market there has been a fair business during March, and sales have been good, with receipts large. The demand has been principally from local dealers and wholesale yards, while the country trade has not been as heavy as expected, but will improve later on. Orders, however, continue to come in, and the list of requirements seems to be more general. A number of inquiries are coming in from Northern and Eastern factories which will soon result in actual business. There is a good demand for furniture stock, with some inquiry for interior finish, while there is a good movement in railroad and car stock. Oak is still the leader among hardwoods, and quartered white and plain red oak are selling well. Stocks of quartered oak are increasing at mills, but it will not be marketable for some time. In plain white oak stocks are about ample for a moderate demand. There is an active demand for poplar, and for all the offerings there is ready sales. In the low grades there is an abundant supply, and the demand is slow. There is a good cottonwood trade in progress, with box boards selling freely, while prices are well maintained at association figures. The rail receipts in this market for the week ending the 25th inst. amounted to 1163 cars, against 1057 cars for the same week last year. The shipments were 639 cars, against 552 cars last year.

#### Bright Trade Prospects.

Mr. J. E. Breland, of Moss Point, Miss., manager for the Platt & Cowan Lumber Co., writes to the Manufacturers' Record that the lumber market in that vicinity has been quite active recently. He says:

"In all departments of this industry there seems to be a fair demand, and the outlook for a good export trade is very flattering. We contemplate an enlargement of our plant at an early day. We are much pleased with our new site, as it is accessible to various avenues of business. We have one of the finest timber regions in the Union. At present there is little demand in our market for anything save yellow pine, while our swamps abound with cypress, sweet gum, oak, poplar, ash, etc. We think it only a matter of time when all these woods will be in fair demand, and our resources for such a trade are almost unlimited.

"The building of the Mobile, Jackson & Kansas City Railroad seems now to be

well assured. It will pass through one of the finest timber regions and open up one of the finest timber trades in the South. The Gulf & Ship Island Railroad is now nearing completion to Hattiesburg. It also passes through a finely-timbered section, and will open up a good timber industry."

#### Lumber Trade in Missouri.

Cape Girardeau, Mo., March 18.

Editor Manufacturers' Record:

The outlook for spring trade in this section is very good. I have large orders for both cypress and white oak, and am running my mill to its full capacity. The Ault Estate & Lumber Co. at Sharpsboro has a large order for white-oak railroad material for use in England, and has been shipping extensively to England during the past year. Owing to railroad connections that have been made during the last year, we have been enabled to get very low freight rates East; consequently Cape Girardeau is in a great deal better shape to compete for Eastern trade than ever before.

M. E. LEMING.

#### Lumber Notes.

The shipments of lumber from the port of Brunswick last week amounted to over 2,000,000 feet.

Mr. G. W. Deen, Way Cross, Ga., will want staves, heads and hoops by carload at lowest prices.

A box factory has just been started at Dinwiddie Court House, Va. M. Saunders, from New York, is superintendent.

The firm of C. M. Bails & Son, of Wilmington, N. C., is exporting staves to Europe, and will load the American schooner Sallie J. Owen with 150,000 to 175,000.

The Bodley Wagon Works, of Staunton, Va., will resume active operations in a few days. The outlook for business the company reports as very encouraging.

The recent rise in the Tennessee river is said to have brought out about 9,000,000 feet of lumber, which has all been received during the past week at Chattanooga, Tenn.

The receipts of lumber at the port of New Orleans, La., for the week ending March 26 were 1,800,500 feet, and for the season 50,547,071 feet, against 45,435,899 feet last year.

The schooner H. G. Milliken was cleared from Wilmington, N. C., last week for Port au Prince, Hayti, with 129,442 feet of lumber and 10,000 shingles by S. & W. H. Northrup.

The S. J. Harris furniture and cabinet factory at Ruston, La., commenced operations on the 25th ult. The factory has a full corps of skilled workmen under the management of Mr. Eli Davis.

The McD. Cain Lumber Co., of Cordele, Ga., will enlarge its extensive plant to twice its present size and manufacture all kinds of building material. The capital stock of the new company is \$50,000.

The saw and planing mill of Joseph Levy, at Provencal, La., was destroyed by fire on the 27th ult. The mill and a quantity of lumber were a total loss, estimated at about \$3000, with no insurance.

It is stated that the late rise in the Tennessee river is the best logging tide that has occurred for several years. Over 5,000,000 feet of logs are now on their way to Chattanooga for the local saw mills.

The Eagle Box Factory, of Fort Smith, Ark., filed articles of incorporation last week. The incorporators are P. B. Davis, J. W. Patrick, Oscar Polenek, Lyon Saunders and James Brizzolario; capital stock \$50,000.

The furniture factory built by Messrs. Yokely, Hollingsworth & Co. at Mt. Airy,



N. C., is getting ready to begin operations. The company will manufacture all grades of furniture, from the richest antique oak and heavy walnut suits to plainer and cheaper kinds.

The Hilton Lumber Co., of Wilmington, N. C., has just received a new locomotive engine for its new tramroad at Long Creek. The company has plenty stock on hand, and will commence operations in its new mill as soon as all its timber arrives.

At Johnson City, Tenn., Messrs. Exum & Boring are negotiating for a site on which to erect a heading factory. The Boring Bros. recently purchased the old axe-handle factory at Johnson City, and will begin the making of plow handles the first of the month.

The dry-kilns of the Norwood & Butterfield Lumber Co.'s plant, situated at Norfield, Miss., were burned on the 24th ult. There was 150,000 feet of lumber burned in the kilns, and the damage is estimated at over \$10,000, partially covered by insurance.

Mr. Henry Wilmoth, of Barre, Vt., has purchased the timber on some thousands of acres of timber land known as the "Boston Land," one mile from Barre, Vt. Mr. Wilmoth will put up two saw mills, and have them in operation some time in April.

The Texas Pine Land Association has erected and has in operation near Silsbee one of the finest saw-mill plants in East Texas. The capacity is 60,000 feet per day. In addition to a large supply of pine timber, the association owns large quantities of white oak timber.

The Weyerhaeuser Syndicate, of Cloquet, Minn., has purchased from C. N. Nelson Lumber Co. the latter's vast pine forests in St. Louis and Carlton county. The amount that the C. N. Nelson Co. gets for its interests is placed at about \$4,000,000 cash or its equivalent.

The box factory established at Houston, Texas, last year by Harding Bros. is now supplying boxes and box material to a number of small towns in that section of the State. The factory is well equipped with all the latest machinery, and has a capacity of 20,000 feet per day.

The schooner Elma cleared from Fernandina last week for Port of Spain, Trinidad, with 250,000 feet of lumber. The Drew Lumber Co., at Fernandina, was loading four schooners last week with lumber, the Aaron Reppard, Robert Graham Dun, Grace Andrews and Susie H. Davidson.

It is stated that arrangements are being made to build an extensive lumber mill on the line of the Georgia Northern Railroad, about nine miles northwest of Moultrie, Ga. As soon as the timber is taken from the land a colony of Northern settlers will be located and large farms opened up in the county.

The value of the timber and lumber cargoes cleared from Mobile, Ala., on Saturday last was \$75,564.78. The list of clearances included one ship and four barks, and the grand total of their cargoes was 50,806 cubic feet of hewn timber, 2,584,218 superficial feet of sawn timber and 297,520 superficial feet of deals and boards.

It is now definitely settled that a large spoke and rim factory will be established at Florence, Ala., at an early day. The plant will be operated by W. E. Winch & Bro., of Warren, Ind., where they have been operating a similar plant. The new enterprise will manufacture wagon material for export trade, and will employ 100 men when in full blast. It will be located in East Florence.

The Louisville Veneer Mills Co., of

Louisville, Ky., filed a deed of assignment last week. The liabilities of the concern will amount, it is said, to about \$30,000. The assets consist of the plant, stock, accounts, etc., and are valued at considerable more than the estimated amount of the debts. It is thought that such arrangements will be made as will enable the company to resume. The Fidelity Safety Vault & Trust Co. is named as assignee.

The Basic City School Desk & Furniture Manufacturing Co.'s plant at Basic City, Va., has been purchased by a company composed of the following well-known gentlemen: Messrs. J. F. Templeton, W. H. Lardelle, George S. Magee and J. E. Kemper. The plant was built by a syndicate of Nashville (Ind.) capitalists at a cost of \$70,000. It has been shut down for the last three years, owing to lack of capital to run it. The company will be reorganized and the factory put in motion as soon as some matters in connection with municipal affairs are settled.

At a conference of lumbermen, held in Cordele, Ga., on the 27th ult., the Mutual Lumber Co., of Georgia, was permanently organized, with the following board of directors: W. B. Stilwell, of the Southern Pine Co., of Georgia; Martin S. Anderson, of Atlanta; H. H. Tift, of Tifton; McD. Camp, of Cordele; M. W. Dixon, of Dixon; Mitchell & Wells, Savannah; Pope, of Atlanta, Ga.; S. R. Western, of Western & Green, Eugene; John W. Evans, of J. H. Betts & Co., Ashburn. The headquarters of the association will be at Tifton, Ga. The organization is intended to arrange a schedule of grades and prices to apply to planing-mill stock especially, and to stop the cutting of prices in competition for business.

The lumber and timber industry at Darien, Ga., has been quite active during the past month. The total shipments for the week ending the 22d ult. were over 5,000,000 feet of timber and lumber. Among the clearances reported are the following: The Southern Pine Co. cleared the schooner B. R. Woodside for New York; the bark Emma Payzant cleared for Newport, England, with 598,113 feet of sawn timber and 18,823 feet of deals; Messrs. Hunter, Benn & Co. cleared the British steamship City of Wakefield for Algon Bay, South Africa, with 1,697,061 feet of sawn timber and 104,000 feet of deals; the bark Romance cleared for Harlingen, England, with 377,152 feet of sawn timber, 52,436 feet of hewn timber and 17,214 feet of deals; and the bark Glynwood for Rhyl, Wales, with 119,595 feet of sawn timber, 46,886 feet of hewn timber and 8837 feet of deals.

The Gulf Coast Lumber Co. met in Mobile, Ala., last week, there being eleven mills represented. The object of the meeting was the discussion of the revised price-list and its adoption. The prices of resawn lumber were discussed at length and a number of suggestions made, but no action was taken. The grade known as Rio schedule was reduced fifty cents per M feet. A committee composed of P. K. Young, A. M. McMillan and E. F. Skinner was appointed to revise the proposed price-list and report at the next called meeting. Among those present were President George W. Robinson, Dantzler Lumber Co., Fensworth Lumber Co., Moss Point, Miss.; Sullivan Lumber Co., Yellow Pine Lumber Co., Hubbard Bros., Mobile, Ala.; Robinson Land & Lumber Co., Chicora, Miss.; Wagar Lumber Co., Wagar, Ala.; Chilton Lumber Co., Glendon, Ala.; McMillan Mill Co., Pine Barren, Ala.; Southern States Land & Lumber Co., Pensacola, Fla.; Skinner Manufacturing Co., Escambia, Fla.; and J. T. Whiting, manager of the Gulf Coast Lumber Co., Mobile.

## Iron Markets.

Cincinnati, Ohio, March 28.

The interest in iron transactions has been confined largely to the central territory during the past week. The East and West have not responded to the increased demand in this section. Purchases have been mostly in round lots, deliveries scattered as far ahead as furnace companies would accept. Buyers apparently realize that at the low prices quoted during the past ten days, iron is relatively cheaper than it was one year ago, when cost of production was much lower. For this reason, they have deemed it wise to hedge against an advance. Some prominent foundries have followed the lead of the rolling mills, and there are still others interested in testing the market. Many of them profess indifference about the reported combinations of ore and iron men, but they have to acknowledge that it is not probable production will be kept up under circumstances entailing a sure loss to the producers. Prices remain about the same. There are anxious sellers who are willing to cut to a limited extent for the sake of securing contracts from gild-edge buyers.

At the close of the week the reports from New York are more favorable regarding the financial situation, and the statements from the West in relation to crops are very encouraging. It is believed that the railroads will have sufficient business to keep up their earnings, and if this proves true their long deferred buying movement may be witnessed this year.

The attitude of many of the Northern furnaces has prevented their securing any of the current business. Those not supplied with ore cannot purchase at present prices and come out even. Others having stock purchased on last year's basis prefer to wait for the advance that seems to them inevitable, and realize a profit later in the season.

Collections continue fairly good. There are some requests for extensions and renewals, but the aggregate amount is not surprisingly large.

We quote for cash f. o. b. cars Cincinnati:

Southern coke No. 1 foundry...	811 00	811 25
Southern coke No. 2 foundry...	10 25	10 50
No. 1 soft...	10 25	10 50
Lake Superior coke No. 1...	13 00	13 50
Lake Superior coke No. 2...	12 00	12 50
Hanging Rock charcoal No. 1...	16 50	17 00
Tennessee charcoal No. 1...	13 50	14 00
Jackson Co. silvery No. 1...	14 00	14 50
Southern coke, gray forge...	9 25	9 50
Southern coke, mottled...	9 00	9 25
Standard Alabama car-wheel...	15 75	16 25
Tennessee car-wheel...	14 50	15 00
Lake Sup. car-wheel & half's...	14 50	15 00

New York, N. Y., March 28.

The chief interest in iron circles in the East is in watching the large transactions in forge and foundry grades in the West. Everywhere east of the Alleghenies complaint is heard of dull trade, and buyers will not entertain thoughts of placing large orders until they can see the work that will absorb the iron. A spirit of pessimism and discouragement pervades financial circles in the East, growing out of the high rates of money, large commercial failures and dull business on Wall street. Manufacturing interests are necessarily affected by this feeling. But New York changes its opinion in a night, and it is cheering to note that the great West, where the business of the country is made, keeps on its course of slow recovery.

Much interest is taken in the effects of sundry combinations in different branches of the iron trade to maintain prices. Conservative men see good in these arrangements, if the right remedies are applied. But it is obviously poor management to try to arrest declining prices by setting arbitrary limits, so long as production, both of raw materials and finished product, is allowed to run in excess of the

country's requirements. The law of supply and demand has the last say in these matters.

We quote for cash f. o. b. docks:

No. 1 X Standard Southern...	—	812 25
No. 1 X choice Virginia, such as Shenandoah...	—	12 75
No. 2 X Alabama or Virginia...	—	11 50
No. 1 soft Ala. or Virginia...	—	11 50
No. 1 X lake ore coke iron...	—	14 50
No. 2 X lake ore coke iron...	—	14 00
Lake Superior charcoal...	16 50	17 00

Philadelphia, Pa., March 28.

March, 1895, heavy sales were made on a rising market. During the present month, one year later, heavy sales have been made on a weak market. This time buyers have dictated terms; a year ago the sellers held the whip hand. Collections are better, and here and there are to be seen signs of improvement. The real, lasting improvement will come after our "man of destiny" has been retired, and a new party, full of American ideas, has been put in power. Those who can weather the storm will be able to take quick advantage of the changed conditions which are to be brought about with the advent of a new administration.

We quote for cash f. o. b. Philadelphia:

No. 1 X standard Alabama...	—	812 75
No. 2 X standard Alabama...	—	12 25
No. 1 X standard Virginia...	—	12 50
No. 2 X standard Virginia...	—	12 25
No. 1 X lake ore iron...	—	15 00
No. 2 X lake ore iron...	—	14 50
Lake Superior charcoal...	17 00	17 50
Standard Georgia charcoal...	17 50	18 00

St. Louis, Mo., March 28.

The buying movement which started in the Eastern markets has spread westward, and although orders are not as large as in other markets, a satisfactory tonnage is rolling up.

Competition for the large business has brought prices of Southern iron down to a very low basis—so low that there is certainly not much profit to the manufacturer, and many consumers know that these conditions cannot continue indefinitely and are taking advantage of the situation.

Consumption of pig iron in the Western market is probably a little in excess of the consumption this time last year.

We quote for cash f. o. b. St. Louis:

Southern coke No. 1...	—	811 50
Southern coke No. 2...	—	11 00
Southern coke No. 3...	—	10 50
Southern gray forge...	—	10 00
Southern charcoal No. 1...	—	15 00
Ohio softeners...	—	16 00
Lake Superior car-wheel...	—	15 00
Southern car-wheel...	—	16 25
Genuine Connellsville coke...	—	5 75
West Virginia coke...	—	5 00

Chicago, Ill., March 28.

The market for pig iron during the past week has been very much like the preceding one—demand light, sales few, and for small tonnage. It is well to note that there has been no further cutting or shading of prices. Local irons remain at about former quotations, with apparently little doing. The recent advance in Northern charcoal irons of about fifty cents a ton seems to be maintained.

Some of the largest producers South are refusing to sell for deliveries beyond four months at present low prices. Bar-iron men tell us that the present is about the duldest and quietest time they ever experienced. Foundrymen generally complain of slack business, but say there is plenty of business in prospect, but, for one reason or another, it does not materialize.

Money remains tight, and commands usually the highest rates.

We quote f. o. b. Chicago as follows:

Lake Superior coke No. 1 fdy...	—	812 50
Lake Superior coke No. 2 fdy...	—	12 00
Lake Sup. charcoal, Nos. 1 to 6...	13 50	14 00
Ohio Scotch No. 1...	15 00	15 50
Jackson Co., O., silvery No. 1...	14 50	15 00
Alabama silvery No. 1...	—	12 50
Southern coke No. 1 foundry...	—	11 50
Southern coke No. 2...	—	11 35
Southern coke No. 3...	—	10 85
Southern coke No. 1 S...	—	11 00
Southern coke No. 2 S...	—	11 25
Mannie...	13 00	13 50

ROGERS, BROWN & CO.

If you wish to keep posted on the progress of the South, read the Manufacturers' Record. Price \$4.00 a year.



## COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

## The Market for Cottonseed Products.

New York, N. Y., March 31.

A fair export demand obtains, while at this writing there are indications that the propositions of purchasers will gain a more attentive ear from holders, which must be interpreted as a further release of stocks on an increased scale. During the week an improvement in lard lent a more hopeful aspect to the cotton-oil situation, but the incident, like its predecessors, proved of a temporary character only. In the event of lard falling to 5 cents, as predicted by the bear side of the market, it is melancholy to contemplate the influence such an untoward event would exercise on cotton-oil values. A ruinously low quotation for the respective grades only would secure the passing trade. However, the situation does not assume so serious an aspect, and it is clear that the recent speculative movement in lard futures reflects the faith of those who are usually in a position to know, that bottom prices have been reached, and that a reactionary movement is among the probabilities. While a steady export trade is proceeding, purchasers are prepared to take up larger lots at a slight concession. It is significant that of the volume of oil which has recently gone into direct consumption, an unusually limited proportion was absorbed in compound-lard manufacture. May lard closed at 5.20 cents, Chicago, bid, and July and September at 5.35 and 5.47½ cents, respectively. Compound lard is quoted at this market at 4½ to 4¾ cents, while tallow, which also exercises a certain influence on cotton-oil consumption, although to a relatively less extent, has fallen to 3¼ cents. Off-grade oils, whether of the refined or crude variety, are in good demand, and scarce, and are quotably almost on a par with the prime grades. Important sales of prime yellow Texas oil are reported for Chicago in bulk at 23 to 23½ cents, while loose crude from same source at 17 cents also comprised a portion of the week's transactions. Owing to the limited supplies and light shipments of Egyptian cottonseed, intended for use in English mills, an improvement in oil values will ensue, the demand for American oil being correspondingly augmented. For this reason, a further decline in oil values here would undoubtedly be the signal for largely increased exports. To this time, however, the dependence of the export trade has been chiefly centred on the demand from France, while at this moment less interest is evinced in cotton oil by consumers in the latter country. The demand for the superior grades, white and butter oil, is slow, while prices are relatively lower than inferior grades. Sales aggregating 3650 barrels prime yellow are reported, at prices ranging from 25¼ to 25½ cents, while a choice lot realized 26 cents, and bulk and barreled crude, chiefly from Texas, to the extent of 2600 barrels, on a 17-cent basis. Prime crude is quoted at 21 to 21½ cents; prime yellow, 25¼ to 25½ cents; off yellow, 25½ cents; butter and white oil, 27 to 28 cents each, and soap stock, ¾ to 1 cent per pound.

Cake and Meal.—Although a fairly good demand obtained for these products throughout the season, it is equally certain that cheap corn restrained the demand to a material extent, and notwithstanding the short seed crop, available stocks exceed the average estimate accorded same. In England, prices of cake

are hardening as the scarcity of stocks become more accentuated. Stocks at that port are less than half of the quantity usually held at this time of the year, while the outports and distributing centres are entirely bare of stocks. Home quotations are unchanged.

## Cottonseed-Oil Notes.

The exports of cottonseed products from the port of Galveston, Texas, for the week ending the 28th ult. were 65,167 sacks of cottonseed meal for Hamburg and 500 bales isle for Manchester, Eng.

The market for cottonseed products at Houston, Texas, was quiet and steady, and unmarked by any special feature during the week. The feeling at present is that oils will show an easier tendency on account of the sharp decline in lard.

The market at New Orleans on the 30th ult. closed firm and unchanged for cottonseed meal and cake at \$17.25 per short ton. Oil was dull, with prime crude in bulk, 18 cents; prime summer yellow in barrels, 24 cents. Receivers' prices for cottonseed products were quoted as follows: Cottonseed, \$9 per ton (2000 pounds) delivered net to the mills; cottonseed meal jobbing at depot, \$17.25 to \$17.50 per short ton, \$18.75 to \$19 per long ton for export f. o. b.; cottonseed oil, 20 to 20½ cents per gallon for strictly prime crude, in bulk 17 to 19 cents, and 24 to 25 cents for refined oil at wholesale or for shipment; oilcake, \$18.75 to \$19 per long ton f. o. b.; foots, 1 to 1½ cents; linters—A, 4 cents per pound; B, 3½ to 3¾ cents; C, 3 cents; hulls delivered at 20 cents per 100 pounds, according to location of mills.

## To Take Prompt Action.

The National Association of Manufacturers, in which ex-Mayor Schieren is a leading spirit, is manifesting great activity. A meeting will be called on Thursday, April 2, at 4 P. M., at the headquarters of the association, rooms Nos. 93 and 94, Times Building. It is intended to call a general meeting of all the Brooklyn and New York members to arrange for prompt action upon Senator Frye's bill proposing to create a Department of Commerce and Manufactures under the care of a commissioner or Cabinet officer.

Ex-Mayor Schieren is succeeding in enlisting the support of some of the most prominent manufacturers of the Atlantic seaboard. His Brooklyn associates are especially prominent. Henry B. Haigh is president of the Manufacturers' Association of Kings and Queens counties, and is a maker of granite ironware. Richard Young is a wealthy manufacturer. Chas. A. Moore is interested in five or six iron-manufacturing concerns in New York, New Jersey and Connecticut. J. Adolph Mollenhauer is the well-known sugar refiner. Ludwig Nissen is a manufacturing jeweler. D. M. Somers is a manufacturer of tinplate and tinware. All of the men named are large employers of labor and active in social and political affairs.—New York Tribune.

Ex-Mayor Schieren, who is taking such an active part in pushing the bill for the creation of a Department of Manufactures, was one of the first to write the editor of the Manufacturers' Record heartily commending his suggestion made to the National Association of Manufacturers at its Chicago meeting suggesting the desirability of such a department.

Mr. Prospero Schiaffino, consular agent of the Italian government at Baltimore, has been notified by the consul-general of Italy at New York that bids will be opened at Rome on April 15, 1896, for the furnishing of the Italian government with 12,000,000 kilograms of Kentucky leaf tobacco and 800,000 kilograms of Virginia leaf tobacco.

## PHOSPHATES.

## Phosphate Markets.

Office Manufacturers' Record,

Baltimore, Md., April 2.

There has been a very quiet market in phosphates during the past week, and the volume of trade so light as to be hardly worthy of comment. There is very little demand from local manufacturers, and out-of-town buyers are sending very few orders forward. The market at producing centres is very steady, and at Charleston the tone is quiet, with very little domestic and foreign demand at the moment. Crude rock is still quoted \$3 at the mines, hot-air-dried \$3.25 f. o. b. Ashley river and \$3.45 f. o. b. Charleston. In Florida there are some signs of a renewal of activity, and the shipments from the ports are increasing. A number of plants that have been idle are getting ready to operate, and several companies that have been holding rock are beginning to ship. The arrivals of phosphate rock in the local market during the past week were as follows: Schooner Walter W. Rasin from Ashpoo, S. C., with 1010 tons, and the schooner S. B. Martz from Ashley river, S. C., with 850 tons. In New York there is no improvement in the freight market for sail tonnage, and very little demand for large tonnage. Steamer freights continue extremely dull. The phosphate charters reported during the past week are as follows: A British steamer, 1595 tons, from Tampa to Hamburg with phosphate at 14/6, April-May; a British steamer, 1186 tons, from Tampa to London with phosphate at 14/6; a British steamer, 1632 tons, from a Southern port to the United Kingdom or Continent with phosphate on private terms, and a British steamer, 1341 tons, from Fernandina to Stettin with phosphate at 15/9.

## Fertilizer Ingredients.

The market for ammoniates has ruled steady, with a moderate demand, and the offerings fair at quotations. Messrs. Thos. H. White & Co., in their circular for March, say: "The demand for ammoniate material seems to keep pace with the supply and to absorb readily all offerings, notwithstanding the complaint of Eastern manufacturers as to the depressed condition of the fertilizer trade in their section." Tankage 9 and 20 is quoted at \$14 to \$14.50 Chicago, and \$11.50 to \$12.50 Kansas City; 9 and 20 tankage, delivered Baltimore, Richmond and Philadelphia, sales at \$1.65 and 10 to \$1.70 and 10; concentrated, Kansas City and Chicago, \$1.35 to \$1.40, and dried blood \$1.45 to \$1.50. Nitrate of soda is firm at quotations.

The following table represents the prices current at this date:

Sulphate of ammonia, gas....	\$2 40a	—
Sulphate of ammonia, bone....	2 25a	2 30
Nitrate of soda.....	1 80a	1 85
Blood meal.....	1 70a	—
Blood (dried).....	1 80a	—
Azotine (dried).....	1 70a	—
Azotine (pork).....	1 75a	—
Tankage (concentrated).....	1 70a	—
Tankage (9 and 20).....	1 70 and 19	—
Tankage (7 and 30).....	17 00a	17 50
Fish (dry).....	20 50a	—
Fish (acid).....	12 00a	—

## Phosphate and Fertilizer Notes.

The schooner Lida J. Lewis cleared from Charleston for Baltimore last week with 810 tons of pebble rock.

The British steamer Ferndene cleared from Savannah, Ga., last week for Revel and Riga, having 1607 tons of phosphate among her cargo.

The schooner Helen G. Moseley arrived at New Orleans last week from Punta Gorda, Fla., with a cargo of phosphate consigned to the National Acid Co.

The German steamer Corona cleared from Savannah last week for Barcelona

and Leghorn, having on board 1035 tons of phosphate rock for the latter port.

The schooner Mary Lee Patton sailed from Port Tampa on the 28th ult. for Baltimore with 830 tons of pebble phosphate from the Palmetto Phosphate Co.

The Black River Phosphate Co. is selling considerable land near Middlesburg, Fla., to settlers. Several large land deals have been recorded during the past thirty days.

The Standard Phosphate Co., of Standard, Fla., commenced to operate its plants on the 28th ult. The company has a large stock of phosphate under its sheds, and commenced shipping during the past week.

The board of directors of the Virginia-Carolina Chemical Co., of Richmond, Va., declared a dividend on the 28th ult. of 2 per cent. on the preferred stock of the company for the quarter ending March 31, 1896, payable on or after the 15th of April.

The British steamship Inishowen Head cleared last week for Liverpool, England, with 544 tons of phosphate among her cargo, and the steamship Garlands with 2500 tons of phosphate for Galatz, Roumania, both by the Brunswick Terminal Co.

The British steamship Rockcliff cleared from Fernandina, Fla., on the 26th ult. for Stettin, Germany, with 3150 tons of phosphate, and the steamship Beresford for Rotterdam, Netherlands, with 2800 tons. The schooner Isaiah Hart for Philadelphia cleared on the above date with 1260 tons of phosphate.

Mr. J. B. Peacher, an experienced phosphate prospector, arrived in Ocala, Fla., last week from a six weeks' trip across the Ocklawaha river in the neighborhood of Electra, Fla. Mr. Peacher found some fine specimens of fuller's earth of a very high grade. He secured options on 820 acres, and on one tract of 120 acres he found a deposit of earth twelve feet deep.

The British steamship Mab sailed from Port Tampa on the 24th ult. for Stettin via New Orleans with 2982 tons of phosphate rock from Franco-American Phosphate Co. The schooner R. W. Hopkins sailed on the 26th ult. for Cartaret, N. J., with 1400 tons of pebble from the Palmetto Phosphate Co. The Henry J. Smith arrived on the 24th, and will take a cargo of phosphate rock.

The phosphate shipments during the past week from Fernandina were quite active, and the water front has not presented so lively an appearance for many months. Among the clearances were the steamship Rockcliff for Stettin, Germany, with 3600 tons of phosphate rock; steamship Durham City for Stettin with 3200 tons; the American schooner Isaiah Hart with a cargo of pebble. Three steamers were loading on the 27th ult., and five or six other steamers are expected at early dates. It is estimated that the phosphate shipments for the month of March will reach 20,000 tons.

The phosphate market at Charleston, S. C., is firm, with a good demand from domestic ports. The comparative exports of crude phosphate rock and ground from September 1, 1895, to March 27, 1896, amounted to 67,577 tons of crude and 7927 tons of ground, against 50,066 tons of crude and 1365 tons of ground rock in 1894-95. In fertilizers the business has been very satisfactory, and shipments from the port of Charleston are much greater than last year. From September 1, 1895, to March 1, 1896, the shipments were 182,828 tons by railroad and 2767 tons by steamer, making a total of 185,595 tons, against 64,176 tons for the corresponding period last year.



# CONSTRUCTION DEPARTMENT.

**THE MANUFACTURERS' RECORD** seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

\*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

New York City—Cotton Compresses.—The American Cotton Co. has been incorporated, under New Jersey laws, with a capital stock of \$6,000,000, being a consolidation of the Bessemer Cotton Compress Co., of Waco, Texas; the Standard Roller Cotton Compress Co., of Little Rock, Ark., and the Cotton Ginner's Compress Co., of St. Louis, Mo. The purpose of the company is to manufacture and introduce cylindrical cotton-compressing machines. Mr. John G. Searles, of Brooklyn, N. Y., is president, and Wm. A. Tuttle, treasurer. Address all correspondence to John G. Searles, of the American Sugar Refining Co., 22 William street, New York city.

## ALABAMA.

Birmingham—Bridges.—The county commissioners will let contracts for two bridges to cost \$10,000.\*

Birmingham—Steel Plant.—A dispatch from New York states that at the Tennessee Coal, Iron & Railway Co.'s annual meeting on the 25th inst., a committee was appointed to attend to the erection of the proposed steel plant, of which mention has frequently been made.

Birmingham—Cotton Mill.—B. H. Finney, of Atlanta, Ga., is endeavoring to interest Birmingham parties in the organization of a cotton-mill company on the co-operative plan.

Cullman—Furniture Factory.—A Dreher & Co. have recently added a new engine and other machinery to their factory.

Fairford—Lumber Mills.—The Seaboard Manufacturing Co. has sold its plant to a Mr. Garrett, of Chicago, Ill., who will continue the operation of the plant. Considerable machinery will be added.

Florence—Laundry.—J. J. Veld, of Cincinnati, Ohio, will equip a steam laundry in Florence.

La Fayette—Oil Mill.—G. E. McGehee is endeavoring to locate a cottonseed-oil mill.

## ARKANSAS.

Fayetteville—Lumber Plant.—G. W. Cleveland and associates have incorporated the Fayetteville Wood, Wagon & Lumber Co., with a capital stock of \$40,000.

Fort Smith—Box Company.—H. R. Davis and others have incorporated the Eagle Box Co., with a capital stock of \$50,000.

Texarkana—Mining.—The Stewart Mining Co. has been incorporated, with D. N. Fobb, president, and a capital stock of \$50,000.

## FLORIDA.

Florida—Fuller's Earth Deposits.—Large tracts of fuller's earth deposits have been found, and J. M. Graham, of Gainesville, Fla., is said to be interested in the development of same.

Gadsden County—Fuller's Earth Deposits. Angus M. Smith, of Jacksonville, Fla., is interested in fuller's earth deposits in Gadsden county, and developments may follow.

Green Cove Springs—Canning, Ice Manufacturing, etc.—F. H. Hafer and others have incorporated the Green Cove Springs Manufacturing Co. for the canning of fruits, etc., manufacture of ice, etc., with capital stock placed at \$5000.

Ocala—Kaolin Deposits.—H. B. Grocott, of Marion county, is endeavoring to arrange for the development of kaolin deposits in his section.

Pensacola—Dock Extensions.—The Louisville & Nashville Railroad Co. (office, Louisville, Ky.) is preparing to commence the dock extensions recently decided upon, and which are to cost about \$150,000. Address E. Van Den Burg, general traffic manager.

Tallahassee—Grist Mill and Gln.—T. McGlynn has erected a grist mill and gln.

Tampa—Brewery.—The new brewery company, noted last week, will be known as the Ybor City Brewing Co., with a capital stock of \$150,000. A plant for brewing and for manufacturing ice, etc., will be erected at once. Edward Manara is president; Geo. T. Chamberlain, secretary, and A. C. Moore, general manager. The plant will be five stories high, and have a capacity daily of 100 barrels, which may readily be doubled.

## GEORGIA.

Adairsville—Crate Factory.—J. B. Gardner has established a crate factory.

Atlanta—Bicycle Works.—V. H. Kriegshaber, Atlanta, Ga., contemplates establishing bicycle works.\*

Augusta—Cycles, etc.—E. W. Deveney and others have incorporated the Southern Cycle & Sporting Goods Co., with a capital stock of \$5000.

Augusta—Cotton Compress.—The Union Warehouse & Compress Co., recently noted, has elected James P. Tobin, president, and will complete arrangements at once for the erection of a plant.

Barnesville—Blacksmith Shop.—J. G. Smith will erect a new brick building for his shop.

Columbus—Planing Mill.—Jones & Pollard will erect a building 100x300 feet and equip it with planing machinery.

Cordele—Ice Plant.—There is talk of the erection of an ice plant. McD. Cain can be addressed.

Cordele—Lumber Plant.—The McD. Cain Lumber Co. will double the size of its plant, and add a sash, door and blind factory.

Cox—Crate Factory.—The Colville Crate Co. has established a factory.

Fitzgerald—Cannery.—The Horticultural Society will endeavor to secure the establishment of a canning factory.

Fitzgerald—Planing Mills.—Smith Bros. & Ritchey are erecting a planing mill.

Gracewood—Cordage Factory.—Allen Jones has completed arrangements for the erection of a cordage factory.

Griswoldville—Kaolin Deposits.—The Georgia Kaolin & Sand Co. will develop the kaolin deposits reported last week.

Harmony Grove—Cotton Mill.—W. T. Thurmond is trying to organize a company to erect a 15,000-spindle and 400-loom mill.

Macon—Tannery.—A movement has been started for the erection of a tannery, and the Messrs. Bernd are interested.

Moultrie—Water Works.—The city has voted an issuance of bonds for the construction of an artesian-well system of water supply. Address the mayor.

Oglesby—Quarry.—Venable Bros., of Atlanta, are opening a new quarry near Oglesby.

Savannah—Bicycle Works.—George W. Huger and associates contemplate entering into the manufacture of bicycles.\*

Savannah—Lampblack Factory.—Seeman, Floyd & Co. will rebuild their lampblack factory on an enlarged scale.

Senola—Ginnery.—The Senola Ginnery & Fertilizer Co. has contracted for four 70-saw gins.

## KENTUCKY.

Hickman—Engine Works.—C. F. Smith and M. O. Solle have established the Model Engine Works for the manufacture of a new engine of the repeating or every revolution type.

Louisville—Oil-can Company.—C. F. Schurr, H. C. Atkinson and William Miller

have incorporated the Hammock Oil Can Co., with a capital of \$3000.

Mackville—Oil Lands.—T. B. Hoover will organize a company to develop oil lands in Mercer county.

Owensboro—Water Works.—The construction of a system of water works is talked of.

Pineville—Flour Mill.—There is talk of the erection of a 40-barrel flour mill. W. B. Owsley can be addressed.

Pineville—Furniture Factory.—There is talk of the erection of a furniture factory, and Bowman & Co. are said to be interested.

## LOUISIANA.

Louisiana—Timber Lands.—A dispatch from Marinette, Wis., states that J. W. Plannigan, J. I. Scott and others, of that city, have started on a trip through Louisiana and Mississippi looking for timber lands for development.

New Orleans—Grain Elevator, etc.—The Illinois Central Railroad Co. (office, No. 1 Park Row, Chicago, Ill.) is now considering bids for the new 1,000,000-bushel grain elevator recently noted, wharf improvements, etc., all to cost about \$450,000. Resident engineer of company in New Orleans is J. G. Mann; engineer at Chicago, J. F. Wallace.

New Orleans—Mercantile.—W. P. Ames and others have incorporated the Mutual Grocery Co., Limited, with a capital stock of \$250,000.

New Orleans—Wharfage.—The New Orleans & Western Railroad has in view the construction of 1000 feet of wharfage; A. W. Swanitz, chief engineer.

New Orleans—Foundry, etc.—J. L. Moore & Co. have asked permission from the city council for the operation of a brass foundry and machine shop at 1682 Tchoupitoulas street.

New Orleans—Water Works.—The New Orleans Water Works Co. has let contract for standpipe, of iron, sixteen feet in diameter, 120 feet high, with a capacity of 250,000 gallons, to supply Algiers.

New Orleans—Cotton Compress.—The New Orleans & Western Railroad Co., A. W. Swanitz, general manager, has let contract for the erection at Port Chalmette of a cotton compress. The compress will have a daily capacity of 22,000 pounds, with a density of fifty-five pounds to the cubic foot, and weigh 400 tons.

New Orleans—Grain Elevator.—The Texas & Pacific Railroad Co. will commence work soon on its new grain elevator at Westwego. The present elevator will be greatly improved, as will also be other facilities.

Patoutville—Sugar Mill.—Mrs. M. A. Patout & Son will enlarge boiler capacity and add a new crusher to their mill.

Ruston—Furniture Factory.—S. J. Harris has established a furniture factory and commenced operations.

## MARYLAND.

Baltimore—Cycle Company.—Albert G. Alford and associates have incorporated the Baltimore Mutual Cycle Co., with a capital stock of \$100,000.

Baltimore—Fire Equipments.—The fire board will have introduced in the city council an ordinance to provide for the erection and equipment of fire-engine houses, three in number.

Baltimore—Sheet-metal Works.—The McCauley & Bryan Co., reported last week as incorporated, will establish a plant, to work at the start twenty-five to fifty workmen; will manufacture sheet-metal specialties and light hardware, and be ready to bid on special work of all kinds, such as cans, pails, boxes, etc.; C. H. McCauley, general manager, Room 315, Neal Building.

Baltimore—Packing-house.—Goodrich & Goodrich, Fidelity Building, Baltimore, are preparing plans for a new packing-house and cold-storage plant for A. J. Wilmerding, of Highlandtown, to cost \$75,000; bids now being received.\*

Baltimore—Electric Lighting and Power.—The Baltimore & Ohio Railroad Co. (John K. Cowen and Oscar G. Murray, receivers,) proposes extending its electric system and making use of the surplus power of the Belt Line Tunnel Co. for lighting, power, etc.

Baltimore—Subway Company.—A bill has been introduced in Congress asking for the incorporation and certain privileges for the Columbia Subway Co., with T. Barton Jones, G. C. Scheurman and others as incorporators.

Govanstown—Water Works.—It is proposed to form a company to establish a water-supply system. Leander Foreman can be addressed.

Mt. Airy—Street Improvements.—The city has voted \$4000 in bonds for the street improvements recently noted.

Taneytown—Water Works.—The town has been authorized by the legislature to vote on an issuance of bonds for \$12,000 to erect a system of water works. Address the mayor.

Washington, D. C.—Athletics.—The International Athletic Park & Amusement Co. has been incorporated, with a capital stock of \$30,000; J. P. Clark, president, and W. S. McKean, secretary.

Washington, D. C.—Publishing Company.—The Recorder Publishing Co. has been incorporated, with a capital stock of \$10,000; Jno. Wedderburn, president.

Washington, D. C.—Brick-kilns.—Alfred Richards will erect three brick-kilns.

Westminster—Electric-light Plant.—The Westminster Electric Co. will enlarge its lighting plant.

Westminster—Ice Plant.—The Westminster Ice Co. will enlarge its ice plant.

## MISSISSIPPI.

Centerville—Brick Works, etc.—A Mr. Haag, of Illinois, has purchased site at Centerville and will erect a brick and tile factory.

Jackson—Electric-light Plant, Printing Works, Laundry, etc.—The Institution for the Education of the Deaf and Blind will put in plant for heating, electric lighting, cabinet shop, printing plant, laundry, etc.; J. R. Dobyns, superintendent.\*

Moss Point—Shingle Mill.—The Pratt & Cowan Lumber Co. contemplates the addition of a shingle mill to its plant.

## MISSOURI.

Kansas City—Electric Plant.—The Metropolitan Street Railway Co. has bought site for \$9000, on which to erect its electric-power plant, previously reported.

Kansas City—Lumber Company.—C. J. Carter and others have incorporated the C. J. Carter Lumber Co., with a capital stock of \$25,000.

Kirksville—Shoe Company.—Max N. Michael and others have incorporated the Reliable Shoe Co., with a capital stock of \$5000.

Moberly—Creamery.—A company to erect a creamery is proposed, and Dr. Booth can be addressed.

Oregon—Electric Plant.—The Oregon & Forest City Railway, Light & Power Co. will erect an electric-power plant to operate its road; building to cost \$1500, and be equipped with 300 horse-power boilers, 230 horse-power engines, generators, etc.\*

Princeton—Yeast Company.—W. J. Corner and others have incorporated the Koated Yeast Co., with a capital stock of \$14,000.

Rich Hill—Hardware Company.—D. H. Wilson and others have incorporated the Sanderson & Wilson Hardware & Furniture Co., with a capital stock of \$20,000.

St. Charles—Brick Works.—Alph Aymond and others have incorporated the St. Charles Brick Co., with a capital stock of \$15,000.

St. Charles—Bridge.—The construction of a highway and electric railway bridge is proposed. A. F. Mispagel can be addressed for information.

St. Louis—Building.—J. F. Cook and others have incorporated the Tacoma Building Co., with a capital stock of \$30,000.

St. Louis—Filter Company.—Daniel Evans and others have incorporated the Imperial Filter Co., with a capital stock of \$30,000.

St. Louis—Power Plant.—M. Niebling and others have incorporated the Universal Light & Power Co., with a capital stock of \$24,000.

St. Louis—Cotton Mill.—An effort is on foot for the erection of a \$500,000 cotton mill, and the matter is in charge of the Business Men's League, committee on manufactures.

St. Louis—Car Works.—The Union Car Works will be organized on the co-operative plan for the erection of a plant for the manufacture of cars. Buildings will be built at a cost of \$30,000, and at the start 100 men will be employed. Mr. W. W. Rockledge has been elected president, and \$50,000 has been paid in, with the intention that as soon as the plant is well under way \$50,000



of additional stock will be issued and sold to the workmen on the time-payment plan.

#### NORTH CAROLINA.

Cedar Falls—Cotton Mill.—The Cedar Falls Manufacturing Co. expects to increase its mill No. 1 with 2000 spindles during the coming season.

Charlotte—Sign Factory.—J. P. Dahlborn will establish a sign factory.

Concord—Cotton Mills and Machine Shops. R. A. Brown states that two cotton mills and machine shops will be built, contingent upon the completion of another railroad into Concord.

Greensboro—Paint Factory.—Banks, Morgan & Holt will erect a paint and varnish factory; site purchased.

Greensboro—Telephone System.—T. J. McAdoo, of Greensboro; R. J. Oliver, of Reidsville, N. C., and W. G. Mebane, of Burlington, N. C., have completed arrangements for the connection of seven North Carolina towns by telephone.

Lincolnton—Cotton Mill.—John Rudasill & Son will erect a cotton mill, as reported last week. They have formed the Indian Creek Manufacturing Co. for the purpose, and are now at work on the development of a water-power which they intend to utilize for operating the plant. About 6000 spindles will be the equipment.\*

Pikeville—Flour Mills.—Smith, Fort & Co. are rebuilding their flour and grist mills.

Reidsville—Water Works.—C. N. Evans is interested in securing the construction of a water-supply system, and desires correspondence with parties who would likely be interested. The city has a population of 4000.

Rocky Mount—Hosiery Mill.—A \$25,000 company is being organized to erect a hosiery mill. W. H. Worsley and others are interested.

#### SOUTH CAROLINA.

Anderson—Cotton Mill.—The Anderson Cotton Mills will erect a duplicate of its plant, at a cost of \$250,000. Present equipment is 17,888 spindles and 600 looms; J. A. Brock, president.

Branchville—Wooden-block Factory.—J. T. Pearlstone and associates contemplate the erection of a plant to prepare wooden blocks for paving purposes.\*

Cathwood—Ginnery and Oil Mill.—The Cathwood Manufacturing Co., lately incorporated, will erect a 20-ton cottonseed-oil mill and a ginnery of thirty bales capacity. A water-power of 100 horse-power is being developed to run the plants.

Charleston—Mattress Factory.—James F. Redding and others have incorporated the Charleston Mattress & Woodenware Co., with a capital stock of \$2000, for the manufacture of mattresses, etc.

Charleston—Saddlery.—A. G. Cudworth and others have incorporated the Cudworth Harness & Saddlery Co., with a capital stock of \$2000.

Cheraw—Cotton Sash-cord Factory, etc.—A report states that Rhode Island parties have just closed a deal for the location of a plant for the manufacture of sash cord, lamp wicks, corset laces, shoestrings, etc.

Cheraw—Knitting Mill.—The Finlayson Hosiery Mills has been organized to establish a plant; E. V. Finlayson, of Charlotte, N. C., president.

Columbia—Mercantile.—John H. Sims and others have incorporated the Columbia Grocery Co., with a capital stock of \$5000.

Columbia—Mercantile.—J. H. Sims and others have incorporated the Columbia Grocery Co., with a capital of \$5000.

Greenville—Canning Factory.—A. M. Howell proposes the establishment of a canning factory.

Orangeburg Court House—Cotton Mill.—It is proposed to organize a \$100,000 company to erect a cotton mill. I. W. Lowman, T. M. Rayson and others are interested.

Yorkville—Druggery.—Hart & Hart have obtained subscription books to a \$5000 company for dealing in drugs, etc.

Yorkville—Rice Mill.—Pelham Morrow is considering equipping a rice-cleaning mill.

#### TENNESSEE.

Chattanooga—Factory.—It is reported that a company will be organized to erect a factory to employ 300 men; plant to cost \$50,000.

Chattanooga—Woodworking Plant.—It is reported that a \$100,000 company is being organized to erect a woodworking plant.

Chattanooga—Distillery.—E. R. Betterton and Frank Holt contemplate the erection of a \$6000 distillery.

Dickson—Brick Works.—A company will

establish a dry-press brick plant of 26,000 daily capacity; location not yet selected. J. I. D. Woodruff can be addressed for information.

Gallatin—Water Works.—The board of aldermen has appointed a committee to investigate as to water works, estimate on cost, etc. Edw. O. Buchanan is chairman of committee.

Johnson City—Foundry, etc.—G. W. Sitten and T. J. Galloway have leased and will operate the Johnson City Foundry and Machine Works.

Johnson City—Heading Factory.—Exum & Boring will erect a heading factory; location not yet definitely decided upon.

Knoxville—Bookbinding.—Bean, Warters & Gaut will add a bookbinding and blank-book-printing plant to their business.

Knoxville—Cotton Mill.—The Knoxville Woolen Mills' addition, noted last week, will include 5000 spindles for manufacturing warps for the company's own use in making jeans.\*

Memphis—Shirt Factory.—Isaac Moon, W. A. Hein and others have incorporated the Memphis Shirt Factory.

Mt. Pleasant—Flour Mill.—Arrangements will be made as soon as possible for the erection of the 100-barrel flour mill of Hunter & Ingram, reported last week.\*

Wolf Creek—Gold Mines.—Robert Ross has discovered gold deposits on property of Thos. B. Huff.

#### TEXAS.

Calvert—Coal Mines.—W. H. A. Lewis, of Calvert; Wm. A. Moroney, of Houston, and others have incorporated the Calvert Coal & Clay Co., for mining, etc., with a capital stock of \$500,000.

Calvert—Coal Mines.—John H. Druman is interested in plans for the development of coal mines on the Garrett farm.

Denison—Hardware Company.—Paul W. Leeper and others have incorporated the Leeper Hardware Co., with a capital stock of \$150,000.

Fort Worth—Brewery.—The Texas Brewing Association is well under way with the extensive improvements to its brewery. These will include a 220-ton ice plant, 500 horse-power engine and other machinery, costing in the aggregate about \$80,000.

Houston—Orchard Company.—O. C. Drew and others have incorporated the Midway Heights Town & Orchard Co., with a capital stock of \$100,000.

Houston—Land Company.—E. P. Hamblen and others have incorporated the Magnolia Park Co., with a capital stock of \$125,000.

Pilot Point—Hay-press Works.—W. J. Pearce and others have incorporated the W. J. Pearce Hay Press Co., with a capital of \$1500.

Rockdale—Coal Mines.—The Lone Star Coal Co. has opened a new coal vein. It is said that at a depth of 105 feet has been struck a five-and-one-half-foot vein of pure, solid lignite, without trace of dirt or slate.

Texas City—Piling Works.—The Teredo Proof Piling Co., of San Francisco, Cal., C. W. Tyndall, local representative, will establish a piling manufactory in Texas City.

Warren—Lumber Company.—C. A. Epping and others have incorporated the Texas Yellow Pine Co., with a capital stock of \$50,000.

#### VIRGINIA.

Alexandria—Bag Factory.—The Emerson Bag & Paper Co., reported last week (under Washington, D. C.) is equipping a factory for parchment and other bags. About twenty hands will be employed at the start.

Coan—Cannery.—Thos. H. Fallin will erect a cannery.

Danville—Bridge.—The Danville & River-side Railway Co. contemplates the construction of an iron bridge across the Dan river five miles from Danville.

Dinwiddie Court House—Box Factory.—A Mr. Saunders, of New York, has established a box factory.

Lynchburg—Knitting Mill.—Samuel Bransford contemplates the erection of a knitting mill.\*

Manchester—Cotton Mill.—The Marshall Manufacturing Co. is adding forty more looms, cards, etc.

Norfolk—Grain Elevators, etc.—The Norfolk & Western Railroad Co. (office, Roanoke, Va.) is having plans prepared for enlarging its big grain elevators at Norfolk. The present capacity of the elevator is 100,000 bushels, which is to be increased to 350,000, at a cost of about \$30,000.

Norfolk—Land Company.—The Park Place Co., with a capital stock of \$100,000, has been incorporated; E. Black, president.

Norfolk—Real Estate.—The Park Row

Construction Co. has been incorporated, with a capital stock of \$100,000, and Wm. M. Ivens, of New York, is president, and David H. Darling, of Brooklyn, N. Y., secretary.

Powhatan Court House—Lumber Mills.—M. W. Nicholls has added another mill to his plant.

Radford—Pipe Works, etc.—The Radford Pipe & Foundry Co.'s plant has been sold to Chas. H. Stephens, of Cincinnati, Ohio, who purchased for the stockholders. It is the intention to put the plant in operation again in the near future.

Richmond—Drug Company.—The L. Wagner Drug Co. has been incorporated, with a capital stock of \$15,000.

#### WEST VIRGINIA.

Grafton—Paving Improvements.—The city has voted an issuance of \$10,000 in bonds to pave streets. Address the mayor.

Mannington—Development.—The Mannington Development Co. has been incorporated, with a capital stock of \$50,000.

Morgantown—Manufactories.—The Morgantown Building & Investment Co. has closed contract with parties from Pittsburg, Pa., for 2000 lots in Beechurst Addition, ensuring the establishment of seven manufactories.

Weston—Water Works.—The city will shortly submit to a vote the proposition for the construction of water works.

Wheeling—F. W. Baumer and others have incorporated the D. H. Beck Co., with a capital stock of \$50,000, for mercantile purposes.

Wheeling—Heating Company.—The Guyandotte Gas & Heating Co. has been incorporated, with a capital stock of \$5000.

Wheeling—Coke Plant.—It is rumored that parties contemplate the erection of 300 coke ovens to test a new smokeless method of manufacturing coke, in which all the waste and by-products are utilized.

Wheeling—Stamping and Lamp Works.—The Nail City Lamp & Stamping Co. is erecting a small temporary furnace to experiment with a new process for enameling ironware. It is claimed that the new enamel is equal to granite and other wares. The vessel to be enamelled will be of stamped sheet iron or steel. If the experiment proves successful, furnace to do the work on a commercial scale.

#### BURNED.

Louisville, Ky.—The Pleasure Ridge Park Distilling Co.'s warehouse, part of machinery, etc.; loss over \$100,000.

Louisville, Ky.—Seaman & Co.'s stove foundry has been damaged to the extent of about \$20,000 by fire.

Memphis, Tenn.—The Anderson Tully Co.'s box factory; loss about \$35,000.

Norfolk, Miss.—The Norwood Butterfield Lumber Co.'s dry-kilns.

Providence.—Joseph Levy's lumber mill; loss \$3000.

Savannah, Ga.—Seaman, Floyd & Co.'s lampblack factory.

Spray, N. C.—The Wilson Aluminum Co.'s calcium-carbide factory.

Weston, W. Va.—Giffin & Edmiston's flour mill; loss \$25,000.

#### BUILDING NOTES.

Anclote, Fla.—Hotel.—It is reported that New York parties are negotiating for the erection of a \$25,000 hotel at Anclote.

Annapolis, Md.—Academy.—The legislature has petitioned to appropriate \$50,000 for improvements to the Naval Academy buildings, including \$30,000 for double houses for four officers, \$5000 to improve cadets' quarters and \$15,000 to complete sewerage system.

Baltimore, Md.—College.—Baldwin & Pennington have prepared plans for a five-story addition to the Baltimore Medical College. Structure will be sixty feet front, with two wings to a depth of ninety feet. Steam heating will be put in, also gas and water pipes; also electric-light tubing; cost to be about \$30,000.

Baltimore, Md.—Hospital.—Ellicott & Lazarus are perfecting plans for a new building for the Maryland University Hospital. The structure is to be 172x46 feet in size, four stories high, with central building 46x60 feet; stable, mortuary and laundry 24x60 feet, and cost about \$50,000. Every modern convenience will be installed.

Chattanooga, Tenn.—Hotel.—S. R. Read will expend about \$10,000 in enlarging, improving and adding to his hotel.

Chattanooga, Tenn.—Dwelling.—D. Giles has permit to erect a \$7000 dwelling.

Chattanooga, Tenn.—School.—The board of education will at once advertise for bids for drawing plans for a two-story school building, to cost about \$12,000.

Dyersburg, Tenn.—Hotel.—Wm. H. Tucker has let contract for the erection of a three-story hotel.

Fort Valley, Ga.—Store.—J. L. Fincher will erect a storehouse.

Hartsville, S. C.—Warehouse.—A company will be organized to establish a tobacco warehouse. Address P. P. Chambers.

Jackson, Tenn.—School.—The city council committee on school buildings is examining plans for a new school building.

Knoxville, Tenn.—Theatre.—Yost & Packard and Baumann Bros. have prepared plans for an opera-house, to be 85x35x240 feet, have three stories and basement, stores on first floor, etc.; seating capacity to be 1800, and cost about \$65,000, and possibly considerably more.

Knoxville, Tenn.—College.—L. Bean has prepared plans for the remodeling of the North College (Chas. W. Dabney, president).

Lake City, Fla.—Jail.—Columbia county will erect a new jail, to cost about \$10,000. Communications from contractors and builders are desired. Address R. T. Booze, chairman.

Lancaster, S. C.—Cottages.—The Lancaster Cotton Mills will erect twenty eight-room cottages.

Lexington, Va.—Courthouse.—The supervisors of Rockingham county have decided upon the erection of a courthouse, to cost about \$20,000.

Louisville, Ky.—Dwellings.—Charles Hale has permit to erect a \$4000 dwelling.

Mobile, Ala.—Hotel.—O. F. Cawthon will remodel throughout the Windsor Hotel, converting it into a modern structure, with electric lighting, ventilation, bathing facilities, etc.

Moundsville, W. Va.—B. M. Spurr and associates will erect a business block.

New Orleans, La.—Dwelling.—A. Dillon has permit for the erection of a \$1000 dwelling.

New Orleans, La.—Dwellings.—Building permits have been issued to J. A. Bernard for \$2400 cottage, to Miss M. Bouche for a \$3000 dwelling, and to A. J. Norcross for a \$3000 residence.

New Orleans, La.—Dwellings.—H. P. Dart has permit to erect two-story dwelling to cost \$20,000; Young Men's Hebrew Club, permit for \$30,000 house, and Mrs. J. C. Walker for two-story dwelling to cost \$2500.

Ocean City, Md.—Dwelling.—W. J. Warring, of Washington, D. C., has let contract for the erection of a dwelling at \$5000; Goodrich & Goodrich, architects, Fidelity Building, Baltimore, Md.

Roanoke Rapids, N. C.—Cottages.—The Roanoke Rapids Power Co. will erect 100 cottages.

Rutherfordton, N. C.—G. H. Mills & Son and associates will erect a large brick building.

San Antonio, Texas.—Bids will be opened April 17 for the construction at Fort Sam Houston of a brick signal-service building according to plans and specifications. Address G. C. Smith, U. S. A., Department of Texas, San Antonio.

Shreveport, La.—Store.—Crawford, Jenkins & Booth will erect a large store building.

Staunton, Va.—Business-house.—Contract has been let to Stewart & Blackburn by Mrs. C. M. Marquis for the erection of a three-story brick business-house to cost over \$8000.

St. Louis, Mo.—Workhouse.—The board of public improvements has authorized plans to be drawn for an addition to the workhouse, to cost complete about \$30,000.

Wake Forest, N. C.—Church.—The Baptists intend building a church building, to cost about \$8000. Address the pastor.

Washington, D. C.—Dwelling.—Samuel C. Smoot will erect a \$5000 dwelling.

Washington, D. C.—Dwellings.—A. L. Barber will erect a \$25,000 dwelling, J. W. Davis a three-story dwelling, and the Knights of Pythias a temple, to cost \$60,000, for which designs will be wanted from members of the order.

Westminster, Md.—Geo. W. Albaugh will erect a block of buildings.

Owing to increasing business, the New York house of the Boston Belting Co. will remove, April 1, to a large and commodious store at 100 and 102 Reade street. A complete stock of the company's products will be carried, and it is expected to make it one of the handsomest mechanical rubber goods stores in New York city.



## RAILROAD CONSTRUCTION.

## Steam Railways.

Aberdeen, N. C.—It is stated that the Aberdeen & West End road has been completed and is now in operation from Aberdeen to Troy, N. C. A. F. Page, at Aberdeen, is president.

Ashland, Ky.—The Board of Trade is endeavoring to have the Ohio River Railroad extended to Ashland. Mayor Newman may be addressed.

Ava, Mo.—Director John A. Spurlock, of the Lebanon, Mansfield & Ava Southern, informs the Manufacturers' Record that it will be sixty miles long. It is to be built first between Mansfield and Ava, thence to Lebanon. It may be extended eventually to Little Rock, Ark. J. G. Koote and G. W. Freeman, of Mansfield, are members of the executive committee.

Charleston, W. Va.—The Coal River Railroad Co. of West Virginia, which intends building a line from St. Albans to a connection with the Norfolk & Western, has elected the following officers: Robert T. Oney, president; Roman Pickens, treasurer, and Fontaine Brown, secretary. All are from Charleston.

Concord, N. C.—R. A. Brown advises the Manufacturers' Record that the town is willing to give \$100,000 to any company building a line to connect Concord with the Seaboard Air Line, and that the business men have made the Seaboard a proposition to this effect.

Danville, Va.—The Danville & Riverside Railway Co., recently incorporated by the legislature to build a line from Danville into Southwestern Virginia, has elected the following officers: T. B. Fitzgerald, president; board of directors, F. N. Burton, J. H. Schofield, James G. Penn, B. F. Jefferson, John N. Wylie, J. E. Schofield, R. I. Anderson, R. A. Schofield and C. G. Holland. It is stated that the work of constructing the road will begin at once.

Fayetteville, Tenn.—C. P. Perlin, of Birmingham, Ala., is said to be vice-president of the company now back of the Decatur, Chesapeake & New Orleans project, and James E. Rhodes, of Chattanooga, Tenn., at the head of the construction company.

Harrisonburg, Va.—The Chesapeake & Western has been completed from Bridgewater to Elkton, twenty-seven miles. It is expected to run trains on this section in a few weeks.

Lake Charles, La.—It is understood that work may begin in a few days on the proposed extension of the Kansas City, Watkins & Gulf from Alexandria to Natchez, Miss. The distance is about sixty-five miles. J. B. Watkins, at Lake Charles, is president.

Marksville, La.—The St. Louis, Avoyelles & Southwestern has been completed to a point five miles from Marksville. F. M. Welch, president, may be addressed.

New Orleans, La.—Chief Engineer Wallace, of the Illinois Central, advises the Manufacturers' Record that twenty-two miles of second track are to be built on the Chicago division, also a number of sidings and yards. About \$650,000 will be spent in all. Bids are now being considered. Mr. Wallace's address is Chicago.

Quitman, Ga.—The company which proposes to build the road from Quitman to a point on the Georgia Southern & Florida is to be called the South Georgia Railroad Co. The directors have elected J. W. Oglesby, president; J. H. Hopson, vice-president; John Tillman, treasurer, and Z. W. Oglesby, superintendent. The line is to be twenty-five miles long.

San Antonio, Texas.—The scheme to extend the Missouri, Kansas & Texas system from San Marcos to San Antonio has been revived by the trip of Prest. Henry C. Rouse and others over the route of the proposed extension. Thomas C. Purdy, general manager, may be addressed at St. Louis.

St. Joseph, Mo.—The secretary of state has issued a charter to the Central Railroad Co. of St. Joseph, capital stock \$900,000. The organization proposes to build a line of railroad from the southern limits of St. Joseph through the counties of Buchanan, Andrew, De Kalb, Gentry, Davis, Harrison and Grundy to the city of Trenton, a distance of ninety miles. The stockholders all reside in St. Joseph, and are James W. Boyd, J. W. Brackett, John A. Duncan, W. Johnson, Adlie A. Rush, John Townsend, J. L. Bittinger, John P. Tyler, R. H. Faucett, S. H. Sommer.

Washington, D. C.—The Herndon & Aldie Railroad Co. has introduced a bill in Congress to obtain permission to build a bridge across the Potomac river near Georgetown, D. C., and lay tracks in the District of Columbia.

## Electric Railways.

Baltimore, Md.—It is reported that work is about to begin on the portion of the Columbia & Maryland electric line between Catonsville and Laurel, Md. Henry T. Douglas, Equitable Building, Baltimore, Md., is supervising engineer.

Chattanooga, Tenn.—S. W. Divine advises the Manufacturers' Record that he expects to form a company at an early date to build the proposed electric line from Chattanooga to Chickamauga Park, ten miles.

Columbia, S. C.—Material is being purchased for the extension of the Columbia electric railway. J. Q. Marshall is president.

Hagerstown, Md.—It is understood that the Hagerstown Railway Co. has decided to extend its trolley line to be built in the city to Williamsport, Md., also. Christian Lynch, at Harrisburg, Pa., may be addressed.

Hagerstown, Md.—The contract for construction of the Hagerstown street railway has been let to John A. Herman, Christian W. Lynch and William Jennings, of Harrisburg, Pa. The road will cost from \$175,000 to \$200,000. The contractors have given bond for \$350,000.

Oregon, Mo.—Secretary J. E. Cummins, of Oregon, advises the Manufacturers' Record that the company which will build the Oregon & Forest City electric road will contract for the entire equipment and power-house. The road will be three and three-quarters miles long, laid with 60-pound steel rails. Four motor cars will be used.

Petersburg, Va.—The Petersburg Street Railway Co. may extend its electric line to Blandford Cemetery, in the suburbs. M. W. Mason is manager.

St. Louis, Mo.—The Southern Electric Railway Co. has decided to build an extension about three miles long. It will issue \$200,000 in 5 per cent. bonds to pay for the extension and make other improvements. J. C. Allen is superintendent.

Washington, D. C.—The Falls Church & Potomac Railway Co., which contemplates building an electric line from Falls Church, Va., to Washington, may soon begin operations. It intends using a steam car ferry across the Potomac river. Dr. A. Hine, of Falls Church, is one of the directors.

Wheeling, W. Va.—A company has been formed to build an electric line from Elm Grove, a suburb of Wheeling, to Triadelphia. It will be about two miles long. Paul O. Reymann, Anton Reymann and Gilmore Browne, of Wheeling, are interested.

## Machinery, Proposals and Supplies Wanted.

**Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.**

**Bicycle Parts.**—George W. Huger, Savannah, Ga., wants to correspond with manufacturers of bicycle parts.

**Bicycle Parts and Material.**—V. H. Kriegshaber, Atlanta, Ga., wants to correspond with manufacturers of bicycle parts and materials, relative to contracting for quantities, to assemble in Atlanta.

**Boiler and Engine.**—W. L. Jett, Roswell, Ga., wants prices on a twelve to sixteen horse-power engine and boiler on skids, new or second-hand.

**Bridges.**—The county commissioners, Birmingham, Ala., want bids for the construction of two bridges across the Warrior river, one to cost about \$5000 and the other about the same.

**Churns, Handles and Dashers.**—John C. Printup, Rome, Ga., wants catalogues and prices of churns, dashers and handles.

**Cold-storage Plant.**—See "Packing-house."

**Cotton Mill.**—The Indian Creek Manufacturing Co., Lincolnton, N. C., is prepared to correspond with machinery makers relative to equipment of a 5000 to 6000-spindle mill.

**Cotton Mill.**—D. A. McDonald, Carthage, N. C., wants to correspond with contractors for cotton-mill equipment.

**Cotton Mill.**—The Bailey-Lebby Co., Charleston, S. C., wants full information regarding the manufacture of towels, estimate on machinery, etc.

**Cotton-mill Machinery.**—The Knoxville Woolen Mills, Knoxville, Tenn., is in the market for 5000 spindles and equipment for the manufacture of warps.

**Dredge.**—Proposals will be opened April 30 for hire of dredge for improving Bayou Lafourche. Address James B. Quinn, 349 Carondelet street, New Orleans, La.

**Electric-light Plant.**—Equipment for electric lighting will be wanted. Address J. R. Dobyns, Jackson, Miss.

**Electric Plant.**—The Lancaster Cotton Mills, Lancaster, S. C., will buy electric plant for mill.

**Elevators.**—The Lancaster Cotton Mills, Lancaster, S. C., will buy elevators for mill.

**Elevators.**—The Lancaster Cotton Mills, Lancaster, S. C., wants to buy two elevators for mill.

**Flour Mill.**—Hunter & Ingram, Mt. Pleasant, Tenn., are about to buy equipment for a 100-barrel flour mill complete.

**Gas Engine.**—L 102, Sun Office, Baltimore, Md., wants to buy a ten to fifteen horse-power gas engine in good condition; state price and maker.

**Gasoline Engine.**—W. L. Giddens, Laredo, Texas, will need a gasoline engine; will also want agency for the engine he decides to use.

**Grinding Mills, etc.**—O. H. Blocker, Old Fort, N. C., wants to correspond with manufacturers of mill-grinding mills and machinery.

**Heating Plant.**—Equipment for heating plant will be wanted. Address J. R. Dobyns, Jackson, Miss.

**Iron Staffs.**—Proposals will be opened April 15 for furnishing six iron staffs, 100 feet high. Address James Gillis, U. S. A., Lieutenant, St. Louis, Mo.

**Ironwork.**—Bids will be opened April 20 for the furnishing of ironwork required for five rostrums, to be located in Illinois, Louisiana, South Carolina, Virginia and North Carolina. Address, for further particulars, Jas. M. Moore, U. S. A., Army Building, Whitehall street, New York city.

**Knitting Mill.**—Samuel Bransford, Box 15, Lynchburg, Va., wants to buy knitting-mill outfit.

**Laundry.**—Equipment for laundry will be wanted. Address J. R. Dobyns, Jackson, Miss.

**Lime.**—H. W. & R. A. Miller, Statesville, N. C., want lime for building.

**Machine Tools.**—Blount & Edwards, Milledgeville, Ga., are in the market for one 28 to 36-inch by 12 to 14-foot or longer lathe, one 16 to 24-inch by eight to 10-foot or longer lathe, one 24x24-inch by five to eight-foot planer, and one 28 to 36-inch drill press.

**Machine Tools.**—The Salem Iron Works, Salem, N. C., wants a good gear cutter up to eight-inch diameter, new, or second-hand if good; index head and centre for larger size work to go on other machine. Send full descriptive circulars and quote lowest cash prices.

**Machine Tools.**—The Bruce Woodworking Factory, Prosperity, S. C., wants prices on engine lathe, drill press, bolt threader and planing machine for lumber. Quote lowest prices.

**Machine Tools.**—W. L. Giddens, Laredo, Texas, will need second shaper, drill press and water emery grinder.

**Machine Tools.**—Henry Walsh, Bessemer, Ala., wants a second-hand lathe of about 40-inch swing.

**Mattresses.**—Sealed proposals will be received until April 30 for the building and loading of mattresses with stone at Plaquemine, La. Address James B. Quinn, U. S. A., 349 Carondelet street, New Orleans, La.

**Packing-house and Cold-storage Plant.**—Bids are now being received for the erection of a \$75,000 packing-house and cold-storage plant, to be built for A. J. Wilmerding, Highlandtown, Baltimore, Md., after plans by Goodrich & Goodrich, Fidelity Building, Baltimore.

**Planer (Lumber).**—See "Machine Tools."

**Printing Plant.**—Equipment for printing plant will be wanted. Address J. R. Dobyns, Jackson, Miss.

**Pumps, Piping, Standpipe, etc.**—S. P. Mann, Box 135, Charlottesville, Va., wants estimates on cast-iron water piping, horizontal power pump of 250,000 gallons capacity daily, steam pump of 1,000,000 gallons capacity daily, and on 50,000-gallon standpipe, 100 feet high.

**Quarrying Machinery, etc.**—The Virginia Onyx Co., J. W. Click, president, Bridgewater, Va., wants information as to the

latest machinery for quarrying and sawing stone, polishing same, etc.

**Railway Equipment.**—J. D. Boushall, Raleigh, N. C., wants to correspond with contractors for electric railways regarding the cost of 11-mile railway, to be operated by electric-power transmitted by water-power.

**Railway Equipment.**—The John G. Hurkamp Co., Fredericksburg, Va., will want to buy about seventy-five tons of 40 to 45-pound steel rails.

**Railway Equipment.**—The La Fayette Railway Co., La Fayette, Ala., wants about thirteen miles of rails, with angle bars or fastenings, 40-pound steel preferred, but could use 46, 48 or 50 at right figures. Quote prices delivered.

**Railway (Electric) Equipment.**—The Oregon & Forest City Railway, Light & Power Co., Oregon, Mo., is ready for bids on power-house, 60x100 feet, to cost not over \$1500, and be equipped with 300 horse-power boilers, one engine of 150 horse-power, one engine of eighty horse-power, one heater, one pump, one railway generator, eighty kilowatt; one arc-light generator, one incandescent generator, railway wire, one feed wire, two passenger cars, two twenty-five horse-power motors, one freight car, with two fifty horse-power motors; three and three-quarter miles of steel rails, of sixty pounds to the yard, with fishplates, bolts and spikes, ties, poles, etc. Address James E. Cummins, secretary. (Will contract for all except grading and laying track.)

**Railway Equipment (Electric).**—Henry C. Jones, 26 Commerce street, Montgomery, Ala., wants to correspond with contractors in regard to grading and laying track; also will want to figure on approximate cost of equipment.

**Railway-equipment Material.**—The Bruce Woodworking Factory, Prosperity, S. C., wants prices on wheels, springs, bar and round iron, etc., for freight cars.

**Roofing.**—H. W. & R. A. Miller, Statesville, N. C., want fire-proof roofing for flour mill.

**Saw Mill.**—L 884, Sun Office, Baltimore, Md., wants a second-hand portable saw mill and engine complete, eighteen to twenty-five horse-power, in good condition.

**Sprinklers.**—The Lancaster Cotton Mills, Lancaster, S. C., will buy sprinkler system for mill.

**Stove Pattern.**—G. H. Holliday, Middlesborough, Ky., wants a step-stove pattern.

**Towel-manufacturing Equipment.**—See "Cotton Mill."

**Watchman's Clock.**—The Elkin Manufacturing Co., Elkin, N. C., wants a watchman's clock, electric, new or second-hand, covering five or six stations, with time clock.

**Water-power Machinery.**—The Indian Creek Manufacturing Co., Lincolnton, N. C., is prepared to correspond with builders of water-power machinery relative to contracting.

**Water Works.**—The town of Gallatin, Tenn., contemplates the construction of a water-supply system. (See item in Construction Department.)

**Water Works.**—See item in Construction Department under Reidsville, N. C.

**Wind-mill.**—Cy. H. Lyle, Johnson City, Tenn., wants to buy a wind-mill and tank for private water supply.

**Woodworking Machinery.**—J. T. Pearlstone, Branchville, S. C., wants to correspond regarding machinery for sawing into 18-inch blocks, for street paving, yellow, red and black cypress.

**Woodworking Machinery.**—Thos. C. Harris, Bluefield, W. Va., is in the market for a second-hand planer and molder.

**Woodworking Plant.**—Equipment for cabinet shop will be wanted. Address J. R. Dobyns, Jackson, Miss.

**Woolen Mill.**—S. T. Jones, Sweetwater, Tenn., invites correspondence from woolen-mill cassimere-loom builders relative to cost of mills.

## TRADE NOTES.

The Westinghouse Machine Co.'s orders for March include three vertical cross-compound engines, each 1000 horse-power, for the Allegheny County Light Co. station, Pittsburg, Pa.

A demand exists for low priced jar rings, and in buying them there is a point which is worthy of consideration. A black ring will, it is said, always outlast a white one of the same cost. Rubber is naturally dark in color. It can be whitened, but only by the use of adulterants, which, it is stated, materially lessens its durability. Taking advantage of this principle, the New York Belting & Packing Co., Limited, 15 Park



Row, New York city, is this year making its low priced jar rings in black compound instead of white. The three essentials—full size, correct weight and durability—are pointed out as features of these rings.

The Connecticut River Manufacturing Co., Holyoke, Mass., has purchased a forty horse-power Ball engine for electric lighting from J. H. Houghton, Boston representative of the Ball Engine Co., Erie, Pa.

A specialty of grate bars of various patterns has been added by the Southern Log Cart & Supply Co., Mobile, Ala. By using an extra hard quality of iron, it is claimed that these grate bars possess unusual life. Any pattern bar desired is made to order.

Chas. A. Schieren & Co., New York city, report a good business in their oak bark tanned leather belting. Among the recent sales were a 64-inch three-ply belt for the United Electric Light Co., Springfield, Mass., and a 52-inch double belt for the Omaha Street Railroad Co., Omaha, Neb.

The Davis & Egan Machine Tool Co., of Cincinnati, Ohio, has just completed a large shipment of tools to its new store, No. 107 Liberty street, New York city, and will make another large shipment this week. This new store is much finer and larger than the old one, and a very large stock of the latest improved machine tools will be carried.

The Green Line oil-tank cars of the Pennsylvania Railroad have been placed with F. M. Pease, 355 Dearborn street, Chicago, Ill., the well-known dealer in railway supplies, for disposal. The high standard maintained by the Pennsylvania Railroad is assurance that these cars are in good running order. A large number of 20-ton flat cars, thirty-five feet long, are also on hand.

The business being done by the Charles Munson Belting Co., 22-36 South Canal street, Chicago, Ill., as we learn from Mr. E. A. Grotzinger, secretary of the company, forms a notable exception to the general dullness in trade. It has just completed a \$9000 order for a sugar plant in Illinois. Among other recent contracts is a large one for an electric-light plant in Springfield, Ohio, which is to be supplied with belts ranging from fourteen to sixty inches in width; an equipment of Eagle belting for the Paepcke-Leicht Lumber Co., at Cairo, Ill., and also of two large lumber mills in Arkansas. The company reports trade among the flour millers very much improved as compared with last year.

A large amount of work is being handled by the Remington Machine Co., Wilmington, Del., builder of Corliss engines, ice-making and refrigerating machinery. This company recently started up the eight-ton ice-making plant for Wm. Curry's Sons, at Key West, Fla., which is working in a most satisfactory manner. They now have a capacity of twenty-three tons per day. An 18-ton refrigerating plant for the New York Condensed Milk Co., at its Elgin factory, has been erected and is ready for the season's work. The three-ton refrigerating plant erected for the creamery of C. C. Wooden, Greenmount, Md., has been put in successful operation. Recent contracts include the following: Kolbe & Baker, Camden, N. J., eighteen-ton refrigerating plant, brine-circulating system; three-ton refrigerating plant for the College of Medicine of the Syracuse University, Syracuse, N. Y.; three-ton ice-making plant, Boland & Gschwind Co., to be erected at Covington, La.; two-ton refrigerating plant, to be erected by C. V. Hill & Co., at Plainfield, N. J.; six-ton refrigerating plant, sold to Chas. Zies, for a pork packer in Baltimore, Md.

Among the many improvements being made, those in the manufacture of leather belting are by no means the least. One of the latest is the new brass staple fastening, which Messrs. I. B. Williams & Sons, of Dover, N. H., have introduced into their belt factory, in that city, for fastening the laps of both double and single belts and running the edges of double belts. Being made of brass, the staples are very tough. Each staple is cut from a coil of oval brass wire, driven into the belt and clinched on the under side, all in one operation, by a powerful and rapid machine. The belt can be quickly fastened, and is not perceptibly stiffened. Each staple being separate and independent, no one pulls on the others, and the belt retains, it is stated, nearly all the elasticity of one fastened with cement only. The stapling machine is of such build as to take in belts of all sizes, and Messrs. I. B. Williams & Sons are now fastening their leather belts in this way, when desired, without additional expense. It adds to the strength and wear of belting, and is being received in the market with great favor.

The staples are set about five-eighths of an inch apart, and are made of one-sixteenth-inch oval brass wire. They do not cut up the belt, and the manufacturers will be glad to send a sample showing the belt fastened to anyone interested. An examination of the belt thus fastened indicates its usefulness for saw mills or for damp localities and very hard work.

An interesting application of the sprinkler system of fire protection has been introduced at the "Boston Store," a large six-story building at Providence, R. I. When every nook and corner, as well as the wide areas of the interior of the Boston Store had been protected with automatic sprinklers, the matter of outside exposure was considered, and a contract was entered into with the General Fire Extinguisher Co., of Providence, to install cornice sprinklers for the protection of the plant from fire in surrounding properties. Pipes were run along the cornice on all sides of the building. To these pipes Grinnell cornice sprinklers are attached on the under side, with the shovel-shaped deflectors towards the building. Four risers within the building, controlled by valves and connected with city water, complete the system. When this work had been done, representatives of the city fire department, together with prominent insurance men and other interested parties, were present by invitation to witness an exhibition of this system of protection from outside exposure. At a given signal the valves were opened, and immediately the water, spurting with great force from the open sprinklers, was distributed by the deflectors upwards and downwards, showering the cornice and enveloping the building on all sides with a sheet of water. It was considered a most gratifying success. A similar system of outside protection, under the appropriate name of drenchers, has been successfully introduced abroad by Dawson, Taylor & Co., Limited, the enterprising representatives of the Grinnell sprinkler in England.

The Providence Steam Engine Co., of Providence, R. I., builder of the Improved Green engine, reports, notwithstanding the dullness in business, a large amount of orders on hand and its shops full of work. Recent shipments and engines now being installed consist of the following: 500 horse-power, Baltimore Sugar Refining Co., Curtis Bay, Md.; 400 horse-power for estate of Enos Lapham, Centerville, R. I.; two 700 horse-power engines, Mt. Vernon Construction Co., Washington, D. C.; 450 horse-power tandem compound, for Gallup & Houghton, North Adams, Mass.; seventy-five horse-power, Syracuse Chilled Plow Co., Syracuse, N. Y.; 125 horse-power, Ashaway Wooden Co., Ashaway, R. I.; 150 horse-power, Iroquois Rubber Co., Setauket, N. Y.; seventy-five horse-power, Dalton & Ingersoll Co., Boston, Mass.; 175 horse-power, Swift Manufacturing Co., Columbus, Ga.; 350 horse-power tandem compound, Arnold Print Works, North Adams, Mass.; 600 horse-power cross compound, Georgia Electric Light Co., Atlanta, Ga.; tandem compound, 300 horse-power, Pencoyde Iron Works, Pencoyde, Philadelphia, Pa.; seventy-five horse-power, Crowders Mountain Cotton Mills, Keeps Mountain, N. C.; fifty horse-power, American Gine Co., Boston, Mass.; 250 horse-power, Peter Shenn & Sons, Philadelphia, Pa.; 100 horse-power, Peninsular Electric Light & Power Co., Newport News, Va.; seventy-five horse-power, Rochester Car Wheel Works, Rochester, N. Y.; 350 horse-power tandem compound, Griffin Manufacturing Co., Griffin, Ga.; 1000 horse-power, Cocheco Manufacturing Co., Dover, N. H.; 500 horse-power, Richmond Locomotive & Machine Co., Richmond, Va.; 350 horse-power, Kensington Electric Co., Philadelphia, Pa.

Perhaps no one thing has added so much to the architectural finish and beauty of the cheaper grade of buildings, which, by the way, are by far the more numerous, than the advent of what is commonly called galvanized iron cornice. Before its day, and that is not many years since, the dull sameness and plain homeliness of the average building front was a source of sorrow to the architect and of regret to the artistically inclined owner, who felt he could not afford carved-stone trimmings, nor yet heavy carved-wood cornices. But one day some lucky wight thought of hammering sheets of iron into the forms of carved wood or stone, and almost in a moment a new industry was born. Now there are very few towns in which the handwork of the galvanized-iron cornice maker is not visible. In fact, comparatively few buildings are erected in which galvanized iron, or its aristocratic neighbor, sheet copper, do not form a part. The sheets of iron, galvanized to prevent rust, lend themselves admirably to the purposes of ornamentation. Machin-

ery has been devised to aid in bending, hammering and joining angles, curves, panels, figures, etc., until now an expert cornice man will reproduce the most intricate and ornate drawings that the art of the architect devises. The cost of such work can almost be fixed to satisfy the taste of the most fastidious; for instance, when a galvanized-iron cornice reminds one of the extensive and elaborate carvings of the fifteenth century, which, if made of stone, would cost ten or fifteen times more. Besides this great difference in price, the difference in weight is greater. In fact, one of the chief advantages is its light weight in proportion to its strength and effectiveness. The factory of the Roanoke Roofing & Metal Cornice Co., at Roanoke, Va., is equipped for furnishing this class of work promptly. It is the object of this company to have its work made in exact accordance with the plans and measurements furnished, so that when placed on the building the various pieces and sections will fit. There is nothing more propelling to a builder than to receive this cornice work in such shape that it cannot be easily adjusted to the building.

### "Straws Show Which Way the Wind Blows."

The Powhatan Clay Manufacturing Co., of Richmond, Va., whose works are situated at Clayville, on the Southern Railway, is a comparatively new concern, having been in operation less than three years.

In this short time it has made what may truthfully be called wonderful progress in the production of building bricks of the highest grade known to the trade.

Its now justly celebrated cream white bricks were first made known through being specified by the well-known New York architects, Messrs. Carrere & Hastings, for facing the walls of that palatial Richmond hotel, "The Jefferson," where 1,000,000 were used.

More recently they have been introduced and used in prominent buildings in Washington, Philadelphia and New York. These bricks are shown to immense advantage in the magnificent Siegel-Cooper Building, now in course of construction on Sixth Avenue, 18th and 19th streets, New York, where about 500,000 are being used.

When one considers that New York is surrounded by some of the oldest and most successful brick-making establishments in this country, and that its architects are most critical in their examination of all new building material brought to their notice, the success this company has achieved is most remarkable.

These cream white bricks command a higher price in New York than any other bricks made in this country, and they have been pronounced by the leading architects as the standard of comparison and excellence.

In order to conduct its New York business to better advantage, the company has recently taken an office in the Mohawk Building, No. 160 Fifth avenue, where a full line of samples may be seen. The office is in charge of its sales manager, Mr. F. H. S. Morrison.

Thus the South is driving its trade direct into the North and meeting Northern competition successfully. The progress of the South in this respect, and in the way in which its manufacturers are finding an outside market for their product, is admirably illustrated in the history of this Richmond company.

**Steam Yachts and Marine Machinery**  
Built by Marine Iron Works, Clybourn and Southport avenues, Chicago. Free illustrated catalogue. Write them for it.

### One Night's Ride.

Passengers ticketed over the Missouri Pacific Railway between St. Louis and Kansas City enjoy an elegant night's sleep in Pullman buffet sleeping cars. The prevailing features are smooth rails, excellent accommodations and low rates. Inquire of any ticket agent of the company for full particulars and tickets, the prices of which are within the reach of all.

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### Deer Park, on the Crest of the Alleghanies

To those contemplating a trip to the mountains in search of health or pleasure, Deer Park, on the crest of the Alleghany Mountains, 3000 feet above the sea level, offers such varied attractions as a delightful atmosphere during both day and night, pure water, smooth, winding roads through the mountains and valleys, and the most picturesque scenery in the Alleghany range. The hotel is equipped with all adjuncts conducive to the entertainment, pleasure and comfort of its guests.

There are also a number of furnished cottages with facilities for housekeeping. The houses and grounds are supplied with absolutely pure water, piped from the celebrated "Boiling Spring," and are lighted with electricity. Deer Park is on the main line of the Baltimore & Ohio Railroad, and has the advantages of its splendid Vestibled Limited Express trains between the East and West. Season excursion tickets, good for return passage until October 31, will be placed on sale at greatly reduced rates at all principal ticket offices throughout the country.

The season at Deer Park commences June 22, 1896. For full information as to rates, rooms, etc., address George D. DeShields, Manager, Deer Park, Garrett county, Md.



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Cattlett, Charles.	6	Filley, A. E., Mfg. Co.	35	Law, Samuel, & Sons, Limited.	36	Porter, H. K., & Co.	13	Warren Chemical & Mfg. Co.	35
Catlin & Browne.	44	Fisher & Davis.	33	Lawrence Cement Co.	24	Poulter & Co.	28	Watkins & Hardaway.	25
C. & B. Line.	40	Fleming Mfg. Co.	41	Leffel, James, & Co.	17	Powhatan Clay Mfg. Co.	9	Weber, F., & Co.	25
Channon, H., Co.	8	Flush Tank Co.	21	Leitch Pump & Machine Works.	43	Pratt, N. P., Laboratory.	6	Webster, Warren, & Co.	41
Chapman, Wm. A., & Co.	6	Foos Gas Engine Co.	19	Leslie, T. H.	26	Prentiss Tool & Supply Co.	27	Wedderburn, John, & Co.	48
Chapman Valve Mfg. Co.	24	Foos Mfg. Co.	22	Lewis, W. S.	28	Price & Co.	29	Weir Frog Co.	4
Charleston Lead Co.	23	Forbes, W. D., & Co.	17	Lidgerwood Manufacturing Co.	4	Price & Heald.	39	Western Maryland Railroad.	14
Charlotte Machine Co.	38	Force & Briggs.	27	Link-Belt Engineering Co.	23	Progress Mfg. Co.	39	Westinghouse, Church, Kerr & Co.	14
Chattanooga Fdy. & Pipe Works.	40	Forsyth, S. C., Machine Co.	12	Lombard Iron Wks. & Supply Co.	9	Providence Machine Co.	38	Westinghouse Elec. & Mfg. Co.	46
Chattanooga Machinery Co.	*	Fort Wayne Electric Corporation.	47	Louche, Chas.	26	Pulsometer Steam Pump Co.	42	Westinghouse Machine Co.	16
Chattanooga Paint Co.	35	Fort Wayne Safety Valve Works.	17	Lowell Machine Shop.	36			West Virginia Bridge Works.	48
Chattanooga Steel Roofing Co.	34	Foster, Chas. F.	6	Ludlow, J. L.	6	Q		Whaley W. B. Smith, & Co.	6
Chesapeake Belting Co.	10	Foster Machine Co.	38	Ludlow-Saylor Wire Co.	34	Q. & C. Company.	12	Wheeling & Lake Erie Railway.	4
Chesley Electric Co.	27	Freese, E. M., & Co.	9	Ludlow Valve Mfg. Co.	45	Queen City Printing Ink Co.	41	White, H. L., & Co.	44
Chesley Steel Castings Co.	11	French, Saml. H., & Co.	*	Lunkenheimer Co., The.	9	Queen City Supply Co.	39	White, L. & I. J., Co.	*
Christy Fire Clay Co.	6			Lyons, A. I.	28	Queen & Crescent Route.	7	White, Thos. H., & Co.	23
				M				Whitinsville Spinning Ring Co.	35
				Main Belting Co.	11	R		Whitney, E. S.	26
				Makepeace, C. R., & Co.	6	Rand Drill Co.	41	Whitridge, Frick & Co.	26
				Mann & Co.	9	Rawson Electric Co.	47	Wilcox, W. A.	20
				Manufacturers' Aut. Sprinkler Co.	44	Record Printing House.	*	Williams Mfg. Co.	42
						Reliance Gauge Co.	15	Williams Bros.	42
						Remington Machine Co.	*	Williams, I. B., & Sons.	11
						Repaug Chemical Co.	10	Williams, John I., & Son.	25
						Replique Governor Works.	47	Williamsport Machine Co.	30
						Rhoads, J. E., & Sons.	40	Wilson, R. M.	10
						Richmond & York River Line.	10	Wolf, Aug., & Co.	24
						Richmond Loco & Mch. Wks.	40	Wood, R. D., & Co.	40
						Ricker, Lee & Co.	28	Woodford, N. B.	27
						Ridgmont Cement & Mfg. Co.	6	Woolverton & Tinsman.	26
						Ripley, H. C.	6	Worthington, Henry R.	24
						Ripple Mfg. Co.	47	Wright Company.	12
						Risdon, T. H., & Co.	*	Wrightsville Hardware Co.	33
						Roanoke Roofing & Met. Co.	34	Y	
						Roberts Steel Chain Belting Co.	23	Verkes & Finen Wood	

Ads. marked thus \* appear every other week.  
Ads. marked thus † appear in first issue of each month.  
Ads. marked thus ‡ not in this issue.